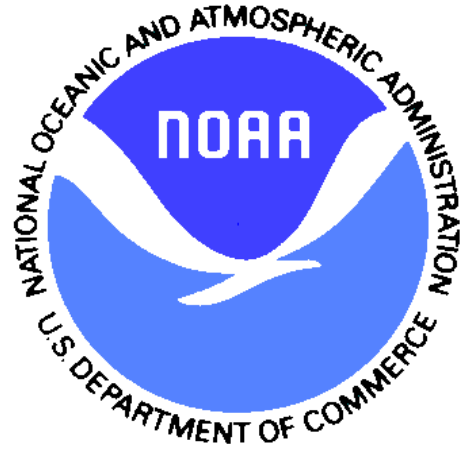
CAMS Project




# NOAA/CAMS CFS Implementation
# Telecommunications Interface Services
# Detailed Design

Final Version 1.16

Prepared by Accenture for

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# Document Control

## *Change Record*

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| 2/19/02 | Robert Legg | 1.0 | AP SI Record Changes |
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# Table of Contents

# 1 Introduction of the Telecommunications Interface Services

As part of the implementation strategy for the Commerce Administrative Management System (CAMS), the National Oceanic and Atmospheric Administration (NOAA) has decided to proceed with the design of a telecommunications interface for the Core Financial System (CFS) to replace the functionality of the Electronic Invoice Translation System (EITS) interface in the current legacy system.

The Telecommunications Interface will collect, consolidate and transfer telecommunications expenses from multiple external system sources. It will then pass the data to the Accounts Payable Standard Interface (Standard Interface) routine, which will in turn pass the data to CFS. It will process payment and accrual information for current period charges, handle On-Line Payment and Collect (OPAC) System charges, generate estimated accruals for select telecommunications expenses and perform basic validation checks of the processed data.

Most of the core processing and reporting activities will be handled by the Standard Interface which is currently in development. The Telecommunications Interface will primarily be responsible for collecting the dissimilar disbursement information from the various external data sources and reformatting it into a useable format for the Standard Interface. The one exception will be the generation of Estimated Accrual records. The Telecommunications Interface will analyze and generate estimated accrual records for select telecommunication expenses. The Estimated Accrual records will then be reformatted into a useable format for the Standard Interface.

The objective of this document is to provide detailed design information for the Telecommunications Interface. The detailed design document is a further refinement of the conceptual design and requirements documents previously distributed for review and comment. For details of the requirements, please refer to the Telecommunications Interface Services Requirements Version 5.2.

## 1.1 Naming Standards

The Telecommunications Interface will adhere to the latest version of the CAMS Support Center (CSC) Programming Standards and Guidelines. All newly created character and graphical user interface (GUI) programs will start with ‘TEL’ to uniquely identify the programs and the screens as Telecommunications Interface specific.

## 1.2 Purpose of Telecommunications Interface Services

The Telecommunications Interface provides a mechanism to efficiently and effectively transfer telecommunications expenses from multiple external data

sources through the Accounts Payable Standard Interface (Standard Interface) to CFS. The input data sources will be responsible for extracting and formatting their transactional data and transferring the data to a predetermined location as either an ASCII fixed format file or an Intermediary Oracle database record. The input data files will be placed directly into a designated directory on the GS140B (CFS server platform) or may be transferred via an electronic medium (such as tape, diskette, or CD) and moved by an Accounting Operations Division (AOD) technician to the appropriate directory for processing on the GS140. The transferred data batch (either ASCII data file or Oracle intermediary table entries) will contain multiple transactions of the same accounting transaction type.

The input data files will be processed and the Standard Interface formatted files will be generated by the Telecommunications Interface through a collection of PL/SQL scripts and UNIX shell scripts. The Telecommunications Interface will extract the data from the input data file, validate the data elements and process the results. The results will be written to a file or table format consistent with the Standard Interface requirements. The Telecommunications Interface routines will be executed on-demand through Graphical User Interface (GUI) or character screens.

### *1.2.1 High-Level Telecommunications Interface Processing and Activities*

Telecommunications Interface processing is divided into three distinctive activities, each supported by unique initiation screens.

1. Generation of telecommunication expense invoice records.
2. Generation of one-month basis estimated accrual records.
3. Generation of yearly average estimated accrual records.

Within each activity the processing involves the following general steps:

1. Transfer of input data files or tables to required Telecommunications Interface specified directories.
2. Processing of the Telecommunications Interface input data files.
3. Transfer of Telecommunications Interface processed data to the Standard Interface for additional processing.

### *1.2.2 High-level Functional Flow of the Telecommunications Interface Services*

The diagram below depicts all of the screens, CAMS/CFS and Telecommunications Interface specific, that are referenced during the execution of the Telecommunications Interface. It is important to note that all of these screens need not be used for every execution of the Telecommunications Interface.

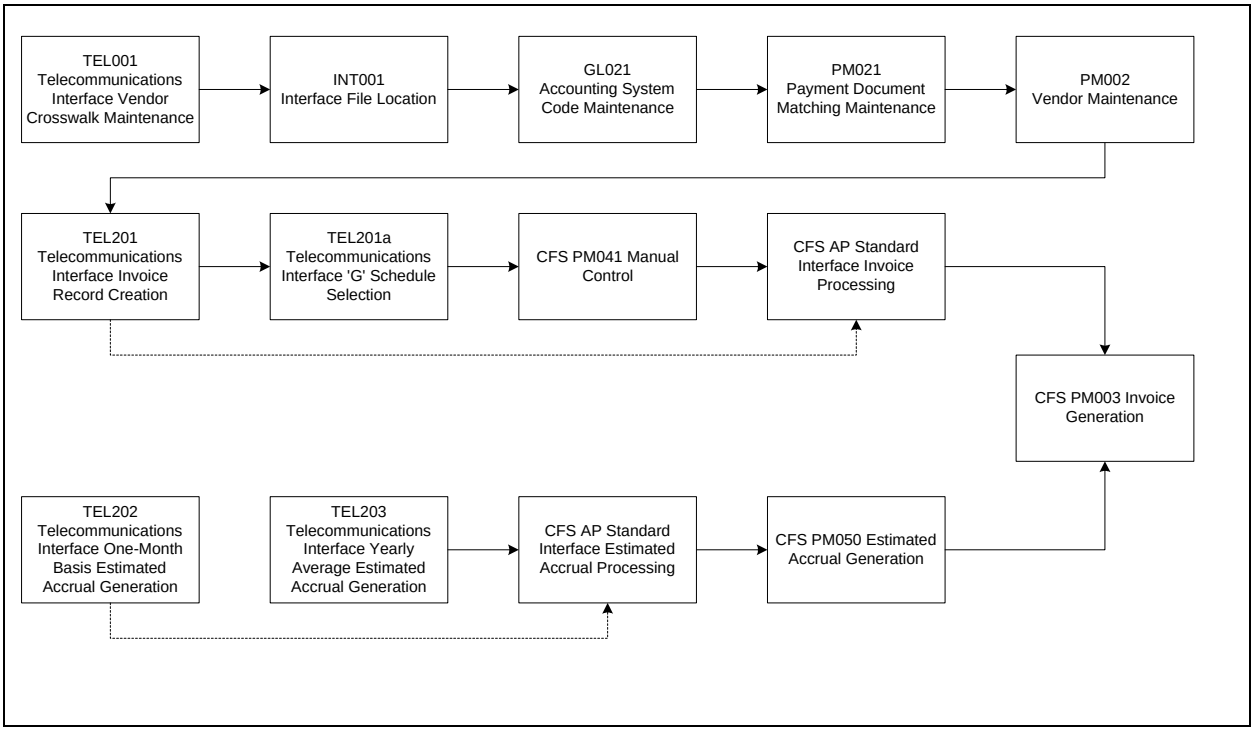



Figure 1.0 - high-level Function Flow of the Telecommunications Interface Services

# 2 Telecommunications Interface Maintenance Screen

In order to function as designed, the Telecommunications Interface will require the development of a new maintenance screen, three new maintenance tables that support the screen and the entry of specific maintenance data. All maintenance data must be entered into several Telecommunications Interface specific and CAMS/CFS maintenance tables prior to the initial execution of the Telecommunications Interface.

The maintenance values will establish and control the Telecommunications Interface directories setup as well as vendor crosswalk and validation capabilities. In addition, the maintenance values will ensure that all records processed through the Telecommunications Interface are easily distinguishable within CFS. The need to readily identify Telecommunications Interface records will be further explained in the estimated accrual sections of this document.

## 2.1 TEL001 - Telecommunications Interface Vendor Crosswalk Maintenance Screen

### *2.1.1 Purpose*

The new TEL001 (Telecommunications Interface Vendor Crosswalk Maintenance Screen) will be used to establish and maintain crosswalk capabilities for telecommunication vendor records. The screen will also function as the primary mechanism to define and control the input and output record formats and the crucial data elements that will be passed to the Standard Interface. Finally, TEL001 will establish the OPAC status of the input files.

### *2.1.2 Form Layout*

The TEL001 screen will be developed as a GUI screen using Oracle Forms Version 6i or higher. The screen is divided into a header and a detail block. The header block will be used to establish and control the following criteria:

- Location of the input data file (Interface File Type)
- Distinguishing record criteria (Invoice Type and Item Type)
- Format of the input data file (File Format)
- OPAC status of the input data file
- Active status of the header record

The detail block will be used to control and maintain the crosswalk between the input file vendor code and the CAMS/CFS Vendor Name, Vendor Number and Vendor ID.

### 2.1.2.1 *TEL001 - Telecommunications Interface Vendor Crosswalk Maintenance Screen*

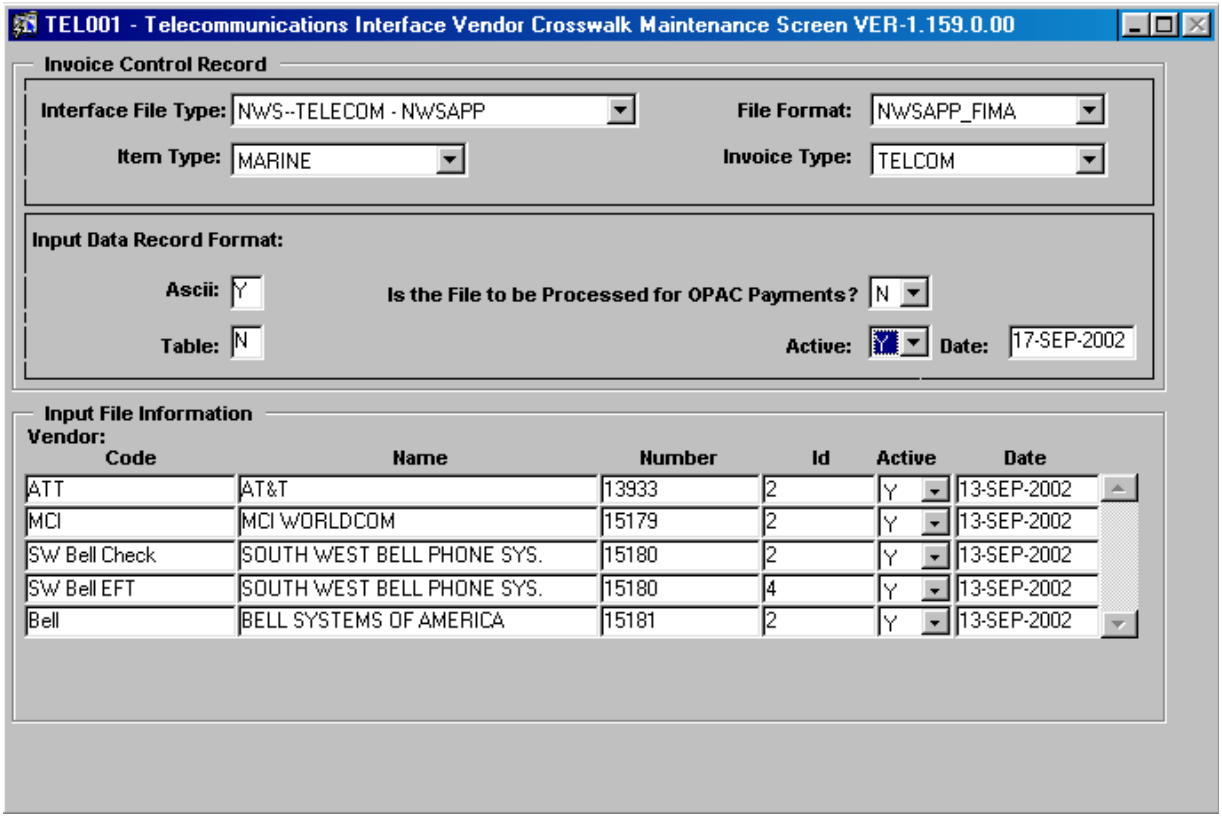



Figure 2.0 - TEL001 Telecommunications Interface Vendor Crosswalk Maintenance Screen

### 2.1.3 *Initial Set-Up*

Prior to the initiation of the Telecommunications Interface invoice generation processing, the Tel_Maint_Control and Tel_Maint_Vendor tables of the TEL001 screen will have to be established and activated. The TEL001 screen is the core of the Telecommunications Interface. It will control and coordinate the linkages between the Telecommunications Interface, the Standard Interface and the CAMS/CFS modules. The TEL001 screen will also be used to establish and maintain the vendor crosswalk for the Telecommunications Interface.

The initial set-up of the TEL001 vendor maintenance values will entail cleaning and consolidating multiple external systems vendor values. The TEL001 will provide a mechanism to link the external vendor information to the appropriate CAMS/CFS vendor values and other Telecommunications Interface specific control values. The initial set-up procedures for the TEL001 screen will not be discussed in the detail design, but will be developed and documented with end-users at a later date.

### *2.1.4 Operating Rules*

The following sections describe the operating rules applicable to the TEL001 screen. Operating rules are directly associated with a particular operation; where as business rules are associated more generally with the whole application. The TEL001 screen will only be accessible to the system administrator. Creating and maintaining the TEL001 maintenance records will be the responsibility of the Telecommunications System Administrator.

#### *2.1.4.1 Create a Record*

- Active control block values must be unique.
- A control block cannot be activated without values in the detail block.
- Detail block values do not have to be unique.
- Only active values that have been established in Telecommunications Interface and CAMS/CFS maintenance tables will be available in the lists of values.

#### *2.1.4.2 Modify a Record*

- Changes to an existing record can only be made after the Active Flag has been set to 'N' (i.e., deactivated) in the control block.
- Only valid values that have been established in Telecommunications Interface and CAMS/CFS maintenance tables will be available in the lists of values.
- Existing records cannot be saved that have been modified to non-unique control block criteria.

#### *2.1.4.3 Save a Record*

- Changes will only be saved when the user clicks the save icon from the Oracle Forms Version 6.0 tool bar or selects the save function from the pull down listings.
- Active and inactive records can be saved.
- Records will be automatically saved when the end-user navigates from the control block to the detail block.

#### *2.1.4.4 Delete a Record*

- A control block cannot be deleted.
- Any detail block, where the control block has been deactivated, can be deleted.

#### *2.1.4.5 Queries*

- Upon entering the screen, TEL001 automatically queries all records in the control and detail blocks that have been previously entered.
- Users are allowed to perform queries on all fields in the control and detail blocks.

### *2.1.5 Business Rules*

The following section describes the high-level business rules applicable to the TEL001 screen.

- All fields in the control and detail blocks must be entered prior to activation of the record.
- A control block cannot be activated without at least one active vendor record.
- The detail block can contain one or many vendor records.
- Vendor records can be activated or deactivated.
- Users can only select active Vendor Name, Vendor Number and Vendor ID combinations as established in the CAMS/CFS tables associated with PM002 screen.
- If the Default_OPAC_Status flag field is populated with ‘Y’ or ‘N’ on the Tel_Maint_Input table the OPAC_Flag field on the TEL001 form will be set to the assigned value and cannot be changed by the end user.
- Only maintenance records that utilize the Excel spreadsheet interface file format (CAMS and FIMA) will allow the end-user to adjust the OPAC_Flag field. All other interface file formats will be assigned by the developer and maintained within the Default_OPAC_Status field in the Tel_Maint_Input table.

### *2.1.6 Input*

The following sections list all tables needed prior to recording entries into the TEL001 screen. The table below lists the database tables where the screen is obtaining the information.

| Table Name | Screen | Usage | Record Requirement |
|---|---|---|---|
| Tel_Maint_Control | TEL001 | Base Table | Base table record of the maintenance control block |
| Tel_Maint_Vendor | TEL001 | Base Table | Base table record of the maintenance detail block |
| Interface_Control | INT001 | LOV | Active and valid item type |
| Interface_Dir_Detail | INT001 | LOV | Active and valid employee records |
| Interface_User_Detail | INT001 | LOV | Active and valid directory locations |
| Accounting_Code | GL021 | LOV | Active and valid invoice and interface file types |

| Table Name | Screen | Usage | Record Requirement |
|---|---|---|---|
| Document_Matching | PM021 | LOV | Active and valid document and item type combinations |
| Vendor_Control | PM002 | LOV | Active and valid vendor records |
| Vendor_Detail | PM002 | LOV | Active and valid vendor records |
| Tel_Maint_Input | N/A | LOV | Valid file format names associated with CTL file names. |

Table 2.0 - TEL001 (Telecommunications Interface Vendor Crosswalk Maintenance Screen) Input Tables

### *2.1.7 TEL001 Screen Processing Logic*

The following sections will include an overview of all tables, both Telecommunications Interface specific and CAMS/CFS, that will be accessed and/or updated by the TEL001 screen. The following sections also include detailed descriptions of the field descriptions, the processing logic associated with the TEL001 screen and the base tables that support the screen.

#### *2.1.7.1 Processing Logic for the Control Block (Tel_Maint_Control) of the TEL001 Screen*

##### *2.1.7.1.1 Tel_Maint_Control Table Overview*

The following document table lists all screen labels and applicable database table names (Field Name) within the control block of the TEL001 screen.

| Screen Label | Field Name | Type and Size |
|---|---|---|
| N/A | Tel_Control_ID | Number(8) |
| Interface File Type | Interface_File_Type | Varchar2(4) |
| Invoice Type | Invoice_Type | Varchar2(6) |
| Item Type | Item_Type | Varchar2(6) |
| File Format | File_Format | Varchar2(13) |
| Is the File to be Processed for OPAC Payments? | OPAC_Flag | Varchar2(1) |
| Input Data Record Format: ASCII | Record_Format_ASCII | Varchar2(1) |
| Input Data Record Format: Table | Record_Format_Table | Varchar2(1) |
| Active | Active_Status | Varchar2(1) |
| Date | Status_Date | Date |
| N/A | User_Name | Varchar2(30) |

Table 2.1 - Overview Processing Logic for the Control Block of the TEL001 Screen

### *2.1.7.1.2 Tel_Maint_Control Table Detailed Review*

The following document tables list the field descriptions and the processing logic for each field within the control block of the TEL001 screen.

| Field Property | Property Value |
|---|---|
| Screen Label | N/A |
| Purpose | This field captures a system generated sequential number that will be used as the primary key of the table. This field will be populated upon creation of a new maintenance control record. |
| Field Name | Tel_Control_ID |
| Table Name | Tel_Maint_Control |
| Displayed | No |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | Yes |
| Unique | Yes. Within the control table. |
| Default Value | Null |
| Screen Display Format | |
| N/A | N/A |
| Processing Logic | |
| Validation Check | See Required and Unique |
| Validation Rules | N/A |
| Tab Position | N/A |

| Field Property | Property Value |
|---|---|
| Screen Label | Interface File Type |
| Purpose | This field describes the specific interface file type and its associated description that is to be processed. |
| Field Name | Interface_File_Type |
| Table Name | Tel_Maint_Control |
| Displayed | Yes |
| Format | N/A |
| Required | Required before the record can be saved. |
| System Generated | No |
| Primary Key | Yes |
| Unique | Yes |
| Default Value | Null |
| Screen Display Format | |
| LOV | Active and valid Interface_Type from the Interface_Control table on screen INT001 and the Code_Description from the Accounting_Code table on screen GL021 where the Code_Value from the Accounting_Code table is equal to the Interface_Type from the Interface_Control table. (Requires active and valid Code_Values from the Accounting_Code table with a Code_Type of 'INTTYP' on screen GL021.) |

| Field Property | Property Value |
|---|---|
| Processing Logic | |
| Validation Check | See LOV |
| Validation Rules | See LOV and Required |
| Tab Position | 1 |

| Field Property | Property Value |
|---|---|
| Screen Label | Invoice Type |
| Purpose | This field describes the specific invoice type that is to be assigned to all processed vendor invoice records. |
| Field Name | Invoice_Type |
| Table Name | Tel_Maint_Control |
| Displayed | Yes |
| Format | N/A |
| Required | Required before the record can be saved. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | 'TELCOM' |
| Screen Display Format | |
| LOV | Active and valid Code_Values from the Accounting_Code table with a Code_Type of 'ACCR' on screen GL021. |
| Processing Logic | |
| Validation Check | See LOV |
| Validation Rules | See LOV and Required |
| Tab Position | 2 |

| Field Property | Property Value |
|---|---|
| Screen Label | Item Type |
| Purpose | This field describes the specific interface file type that is to be assigned to all processed vendor invoice records. |
| Field Name | Item_Type |
| Table Name | Tel_Maint_Control |
| Displayed | Yes |
| Format | N/A |
| Required | Required before the record can be saved. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | Null |
| Screen Display Format | |
| LOV | Active and valid Code_Values from the Accounting_Code table with a Code_Type of 'CDITEM' on screen GL021. |
| Processing Logic | |
| Validation Check | See LOV |
| Validation Rules | See LOV and Required |

| Field Property | Property Value |
|---|---|
| Tab Position | 3 |

| Field Property | Property Value |
|---|---|
| Screen Label | File Format |
| Purpose | This field describes the format of the file to be processed by the telecommunications interface. The file format selected is associated with a CTL file name. Both values are maintained on the Tel_Maint_Input table. |
| Field Name | File_Format |
| Table Name | Tel_Maint_Control |
| Displayed | Yes |
| Format | N/A |
| Required | Required before the record can be saved. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | Null |
| Screen Display Format | |
| LOV | File Format names established on the Tel_Maint_Input table. |
| Processing Logic | |
| Validation Check | See LOV |
| Validation Rules | See LOV and Required |
| Tab Position | 4 |

| Field Property | Property Value |
|---|---|
| Screen Label | Is the File to be Processed for OPAC Payments? |
| Purpose | This field captures the OPAC status of the file to be processed. |
| Field Name | OPAC_Flag |
| Table Name | Tel_Maint_Control |
| Displayed | Yes |
| Format | N/A |
| Required | Only ‘Y’ or ‘N’ allowed. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | ‘N’ |
| Screen Display Format | |
| List Box | Yes |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |
| Tab Position | 5 |

| Field Property | Property Value |
|---|---|
| Screen Label | Input Data Record Format: ASCII |

| Field Property | Property Value |
|---|---|
| Purpose | This non-enterable field describes the expected input record format of the data batch to be processed by the telecommunications interface. If the Input_Format_Type on the Tel_Maint_Input table is set to 'F' for the maintenance record where the File_Format as selected on TEL001 is equal to the Input_File_Format_Name on the Tel_Maint_Input table then this field will be set to 'Y'.<br><br>A 'Y' in the field indicates that the input record will be a flat file. The Telecommunications Interface will reference the directory setup on INT001 for the specified Interface_File_Type. |
| Field Name | Record_Format_ASCII |
| Table Name | Tel_Maint_Control |
| Displayed | Yes |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Screen Display Format | |
| Text Box | Derived value from the Tel_Maint_Input table. |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | If the Record_Format_ASCII column is set to 'Y' than the Record_Format_Table column for the same record must be set 'N'. |
| Tab Position | N/A |

| Field Property | Property Value |
|---|---|
| Screen Label | Input Data Record Format: Table |
| Purpose | This non-enterable field describes the expected input record format of the data batch to be processed by the telecommunications interface. If the Input_Format_Type on the Tel_Maint_Input table is set to 'T' for the maintenance record where the File_Format as selected on TEL001 is equal to the Input_File_Format_Name on the Tel_Maint_Input table then this field will be set to 'Y'.<br><br>A 'Y' in the field indicates that the input record will be an Oracle intermediary table. The Telecommunications Interface will *NOT* reference the directory setup on INT001 for the specified Interface_File_Type. The table name will be inserted into the coding logic. |
| Field Name | Record_Format_Table |
| Table Name | Tel_Maint_Control |
| Displayed | Yes |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |

| Field Property | Property Value |
|---|---|
| Default Value | N/A |
| Screen Display Format | |
| Text Box | Derived value from the Tel_Maint_Input table. |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | If the Record_Format_Table column is set to 'Y' than the Record_Format_ASCII column for the same record must be set 'N'. |
| Tab Position | N/A |

| Field Property | Property Value |
|---|---|
| Screen Label | Active |
| Purpose | This field captures the active status of the maintenance control record. |
| Field Name | Active_Status |
| Table Name | Tel_Maint_Control |
| Displayed | Yes |
| Format | N/A |
| Required | Only 'Y' or 'N' allowed. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | 'N' |
| Screen Display Format | |
| List Box | Yes |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | ▸ All fields on the control and detail blocks must be populated prior to activation.<br>▸ At least one record in the detail block must be active prior to activation. |
| Tab Position | 6 |

| Field Property | Property Value |
|---|---|
| Screen Label | Date |
| Purpose | This field captures the date that the maintenance record was last activated or deactivated. |
| Field Name | Status_Date |
| Table Name | Tel_Maint_Control |
| Displayed | Yes |
| Format | DD-MON-RRRR |
| Required | No |
| System Generated | Yes. Set as TRUNC(SYSDATE) upon activation or deactivation of the maintenance record. |
| Primary Key | No |
| Unique | No |
| Default Value | Null |
| Screen Display Format | |

| Field Property | Property Value |
|---|---|
| Text Box | Yes |
| Processing Logic | |
| Validation Check | See Format |
| Validation Rules | Set as TRUNC(SYSDATE) upon activation or deactivation of the maintenance record. |
| Tab Position | N/A |

| Field Property | Property Value |
|---|---|
| Screen Label | N/A |
| Purpose | This field captures the user name or the individual or application that made the last modification to the data record. |
| Field Name | User_Name |
| Table Name | Tel_Maint_Control |
| Displayed | No |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | Null |
| Screen Display Format | |
| N/A | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | ▸ Set as Oracle Database User ID upon activation or deactivation of the maintenance record.<br>▸ See Required. |
| Tab Position | N/A |

Table 2.2 - Detailed Processing Logic for the Control Block of the TEL001 Screen

### *2.1.7.1.3 Tel_Maint_Vendor Table Overview*

The following document table lists all screen labels applicable database table names (Field Name) within the detail block of the TEL001 screen.

| Screen Label | Field Name | Type and Size |
|---|---|---|
| N/A | Tel_Control_ID | Number(8) |
| N/A | Tel_Detail_ID | Number(3) |
| Input File Information: Vendor: Code | Input_Vendor_Code | Varchar2(16) |
| CAMS/CFS Information: Vendor: Name | CFS_Vendor_Name | Varchar2(30) |
| CAMS/CFS Information: Vendor: Number | CFS_Vendor_Number | Number(10) |
| CAMS/CFS Information: Vendor: ID | CFS_Vendor_ID | Number(6) |
| N/A | CFS_Vendor_Payment_Method | Varchar(6) |

| Screen Label | Field Name | Type and Size |
|---|---|---|
| CAMS/CFS Information: Vendor: Active | Vendor_Status | Varchar2(1) |
| CAMS/CFS Information: Vendor: Date | Vendor_Status_Date | Date |

Table 2.3 - Overview Processing Logic for the Detail Block of the TEL001 Screen

### *2.1.7.1.4 Tel_Maint_Vendor Table Detailed Review*

The following document tables list the field descriptions and the processing logic for each field on the detail block of the TEL001 screen.

| Field Property | Property Value |
|---|---|
| Screen Label | N/A |
| Purpose | This field captures a system generated sequential number that will be used as part of the primary key of the table. This field will be the foreign key that links the detail records with the control record. This field will be populated upon creation of a new maintenance detail record. |
| Field Name | Tel_Control_ID |
| Table Name | Tel_Maint_Vendor |
| Displayed | No |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | Yes |
| Unique | No |
| Default Value | Null |
| Screen Display Format | |
| N/A | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |
| Tab Position | N/A |

| Field Property | Property Value |
|---|---|
| Screen Label | N/A |
| Purpose | This field captures a system generated sequential number that will be used as part of the primary key of the table. This field will be populated upon creation of a new maintenance detail record. |
| Field Name | Tel_Detail_ID |
| Table Name | Tel_Maint_Control |
| Displayed | No |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | Yes |

| Field Property | Property Value |
|---|---|
| Unique | Yes. Within the detail table. |
| Default Value | Null |
| Screen Display Format | |
| N/A | N/A |
| Processing Logic | |
| Validation Check | See Required and Unique |
| Validation Rules | N/A |
| Tab Position | N/A |

| Field Property | Property Value |
|---|---|
| Screen Label | Input File Information: Vendor: Code |
| Purpose | This field captures the name of the vendor as supplied on the input data records. For input files that do not supply a vendor name 'None' is acceptable. |
| Field Name | Input_Vendor_Code |
| Table Name | Tel_Maint_Vendor |
| Displayed | Yes |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | Null |
| Screen Display Format | |
| Text Box | Yes |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | Must be entered before activation. |
| Tab Position | 1 |

| Field Property | Property Value |
|---|---|
| Screen Label | CAMS/CFS Information: Vendor: Name |
| Purpose | This field captures the name of the vendor as recorded in the CFS tables Vendor_Control and Vendor_Detail on screen PM002. |
| Field Name | CFS_Vendor_Name |
| Table Name | Tel_Maint_Vendor |
| Displayed | Yes |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | Null |
| Screen Display Format | |
| LOV | Active and valid Report_Name from the Vendor_Control table. |
| Processing Logic | |

| Field Property | Property Value |
|---|---|
| Validation Check | See LOV |
| Validation Rules | Must be entered before activation. |
| Tab Position | 2 |

| Field Property | Property Value |
|---|---|
| Screen Label | CAMS/CFS Information: Vendor: Number |
| Purpose | This field captures the number of the vendor as recorded in the CFS tables Vendor_Control and Vendor_Detail on screen PM002. |
| Field Name | CFS_Vendor_Number |
| Table Name | Tel_Maint_Vendor |
| Displayed | Yes |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | Null |
| Screen Display Format | |
| LOV | Active and valid Vendor_No from the Vendor_Control and Vendor_Detail tables. |
| Processing Logic | |
| Validation Check | See LOV |
| Validation Rules | ▸ Must be entered before activation.<br>▸ Selection based on the Vendor Name entered in the CFS_Vendor_Name field. |
| Tab Position | 3 |

| Field Property | Property Value |
|---|---|
| Screen Label | CAMS/CFS Information: Vendor: ID |
| Purpose | This field captures the ID Number of the vendor as recorded in the CFS tables Vendor_Control and Vendor_Detail on PM002. |
| Field Name | CFS_Vendor_ID |
| Table Name | Tel_Maint_Vendor |
| Displayed | Yes |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | Null |
| Screen Display Format | |
| LOV | Active and valid Vendor_ID from the Vendor_Detail table. |
| Processing Logic | |
| Validation Check | See LOV |

| Field Property | Property Value |
|---|---|
| Validation Rules | ▸ Must be entered before activation.<br>▸ Selection based on the Vendor Name entered in the CFS_Vendor_Name field.<br>▸ Must be equal to 'Payment' Vendor_ID.<br>▸ If the OPAC_Flag on the Tel_Maint_Control table is equal to 'Y' then the Payment_Method on the Vendor_Detail table for the vendor record must be equal to 'SF1081'.<br>▸ If the OPAC_Flag on the Tel_Maint_Control table is equal to 'N' then the Payment_Method on the Vendor_Detail table for the vendor record must *NOT* be equal to 'SF1081'. |
| Tab Position | 4 |

| Field Property | Property Value |
|---|---|
| Screen Label | N/A |
| Purpose | This field captures payment method that is associated with the CFS_Vendor_No and CFS_Vendor_ID as entered on the TEL001 maintenance screen. This value will be derived from the Payment_Method field on the Vendor_Detail table in CFS for the Vendor_No and Vendor_ID as recorded in the CFS tables Vendor_Control and Vendor_Detail on PM002. |
| Field Name | CFS_Vendor_Payment_Method |
| Table Name | Tel_Maint_Vendor |
| Displayed | No |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | Null |
| Screen Display Format | |
| List Box | All fields on the control and detail blocks must be populated prior to activation. |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | See List Box |
| Tab Position | N/A |

| Field Property | Property Value |
|---|---|
| Screen Label | CAMS/CFS Information: Vendor: Active |
| Purpose | This field captures the active status of the vendor record on the TEL001 screen. This value does not reflect that active status of the vendor record in the CFS tables. |
| Field Name | Vendor_Status |
| Table Name | Tel_Maint_Vendor |
| Displayed | Yes |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |

| Field Property | Property Value |
|---|---|
| Unique | No |
| Default Value | Null |
| Screen Display Format | |
| List Box | All fields on the control and detail blocks must be populated prior to activation. |
| Processing Logic | |
| Validation Check | Only 'Y' or 'N' allowed. |
| Validation Rules | See List Box |
| Tab Position | 5 |

| Field Property | Property Value |
|---|---|
| Screen Label | CAMS/CFS Information: Vendor: Date |
| Purpose | This field captures the date that the vendor record was last activated or deactivated on the TEL001 screen. |
| Field Name | Vendor_Status_Date |
| Table Name | Tel_Maint_Vendor |
| Displayed | Yes |
| Format | DD-MON-RRRR |
| Required | No |
| System Generated | Yes. Set as TRUNC(SYSDATE) upon activation or deactivation of the vendor record. |
| Primary Key | No |
| Unique | No |
| Default Value | Null |
| Screen Display Format | |
| Text Box | Set as TRUNC(SYSDATE) upon activation or deactivation of the vendor record. |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | See Text Box |
| Tab Position | N/A |

Table 2.4 - Detailed Processing Logic for the Detail Block of the TEL001 Screen

### *2.1.7.2 Processing Logic for the Telecommunications Interface Input Maintenance Table (Tel_Maint_Input)*

The purpose of this table is to provide an association between the input record formats entered by the end user on the TEL001 screen and the CTL file formats and or PL/SQL routines needed to transfer the input records from input sources to the Telecommunications Interface.

The CTL file format defines the load process to be used to import input data into the working table that is processed by the Telecommunications Interface. A unique CTL file format and PL/SQL routine will be developed for each of the external data source systems that utilize flat files (ASCII) to transfer the input records.

External data source systems that utilize Oracle intermediary tables instead of flat files will not require CTL files but will use PL/SQL routines to transfer the input records.

This table also provides a central location where all data load values for the Telecommunications Interface are maintained. Only database administrators will have the ability to modify or add values on this table.

#### *2.1.7.2.1 Tel_Maint_Input Table Overview*

The following document table lists the database table names (Field Names) within the Telecommunications Interface CTL File Name Maintenance Table.

| Screen Label | Field Name | Type and Size |
|---|---|---|
| N/A | Tel_Maint_Input_Record_ID | Number(8) |
| N/A | Input_File_Format_Name | Varchar2(13) |
| N/A | Input_Format_Type | Varchar2(1) |
| N/A | Temp_Table_Builder_Script | Varchar2(30) |
| N/A | Temp_Inv_Table_Builder_Script | Varchar2(30) |
| N/A | CTL_File_Name | Varchar2(30) |
| N/A | Load_Processing_Table_Script | Varchar2(30) |
| N/A | User_Name | Varchar2(30) |
| N/A | Modification_Date | Date |
| N/A | Device_Name | Varchar2(30) |
| N/A | Table_Name | Varchar2(30) |
| N/A | Default_OPAC_Status | Varchar2(1) |

Table 2.5 - Overview Processing Logic for the Telecommunications Interface CTL File Name Maintenance Table

#### *2.1.7.2.2 Tel_Maint_Input Table Detailed Review*

The following document tables list the column descriptions and the processing logic for each column on the Telecommunications Interface CTL File Name Maintenance Table.

| Column Property | Property Value |
|---|---|
| Purpose | This field captures in the file format of the input data record. The values entered into this field will be entered and maintained by the system administrator and selected as the 'File Format' on the TEL001 screen. |
| Field Name | Input_File_Format_Name |
| Table Name | Tel_Maint_Input |
| Format | N/A |
| Required | Yes |
| System Generated | No |

| Column Property | Property Value |
|---|---|
| Primary Key | No |
| Unique | No |
| Default Value | Null |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures a flag which indicates the input record format. The values entered into this field will be entered and maintained by the system administrator and will be displayed on the TEL001 screen for an associated File Format.<br><br>'F' stands for Flat File (ASCII)<br>'T' stands for Oracle intermediary table |
| Field Name | Input_Format_Type |
| Table Name | Tel_Maint_Input |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | Null |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | Can only be 'F' or 'T'. |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the name of the PL/SQL routine that will be used to build the temporary table that is identical in format to the input flat file format. PL/SQL routines will only be developed and recorded in this column for input data sources that utilize flat files to transfer input record batches. |
| Field Name | Temp_Table_Builder_Script |
| Table Name | Tel_Maint_Input |
| Format | N/A |
| Required | Yes if Input_Format_Type is equal 'F' |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | Null |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the name of the PL/SQL routine that will be used to build the temporary Telecommunications Interface processing tables (i.e. Tel_Inv_Header, Tel_Inv_Control and Tel_Inv_Detail). PL/SQL routines will be developed and recorded in this column for all input data sources. |
| Field Name | Temp_Inv_Table_Builder_Script |
| Table Name | Tel_Maint_Input |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | Null |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the name of the CTL file that will be used to control the coping of the data from the initial input temporary table to the Telecommunications Interface temporary table. CTL files will only be developed and recorded in this column for input data sources that utilize flat files to transfer input record batches.<br><br>The CTL file name is associated with the input file format name that correlates to the 'File Format' selected on the TEL001 screen. When an invoice is processed the Telecommunications Interface will select the applicable load process based upon the CTL file name specified. |
| Field Name | CTL_File_Name |
| Table Name | Tel_Maint_Input |
| Format | N/A |
| Required | Yes if Input_Format_Type is equal 'F' |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | Null |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the name of the PL/SQL routine that will be used to copy the data from the initial input temporary table to the Telecommunications Interface temporary table. The PL/SQL routines will be developed and recorded in this column for all input data sources that utilize flat files or Oracle intermediary tables to transfer input record batches. |
| Field Name | Load_Processing_Table Script |
| Table Name | Tel_Maint_Input |
| Format | N/A |

| Column Property | Property Value |
|---|---|
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | Null |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the user name of the individual that modified the row on the Tel_Maint_Input table. |
| Field Name | User_Name |
| Table Name | Tel_Maint_Input |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | Set as Oracle Database User ID |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the date the modification to the row on the Tel_Maint_Input table was performed. |
| Field Name | Modification_Date |
| Table Name | Tel_Maint_Input |
| Displayed | N/A |
| Format | dd-mon-rrrr |
| Required | Yes |
| System Generated | Yes. Set as TRUNC (SYSDATE). |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the terminal code through which the row on the Tel_Maint_Input table was last modified. |
| Field Name | Device_Name |

| Column Property | Property Value |
|---|---|
| Table Name | Tel_Maint_Input |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes. Set as Userenv ('Terminal'). |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the intermediary table name that is associated with each of the input data sources that utilize Oracle intermediary tables to transfer their input data. No processing or validations reference this column as the table names are hard coded into the load routines, but this column is helpful as a reference tool. |
| Field Name | Table_Name |
| Table Name | Tel_Maint_Input |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | Null |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Field Property | Property Value |
|---|---|
| Screen Label | N/A |
| Purpose | This database field captures default OPAC status as determined by the developer for a particular interface file format. If this database field is populated on the table, the value will populate and protect the OPAC_Flag on the TEL001 screen. If no value is captured in this database field the OPAC_Flag on the TEL001 form will be used to determine the OPAC status of the maintenance record.<br><br>'Y' indicates that the selected Interface_File_Format is for an OPAC record. 'N' indicates that the selected Interface_File_Format is not for an OPAC record. A NULL value indicates that the selected Interface_File_Format's OPAC status will be determined by the value entered in the OPAC_Flag field. |
| Field Name | Default_OPAC_Status |
| Table Name | Tel_Maint_Input |
| Displayed | No |
| Format | 'Y', 'N' or NULL |

| Field Property | Property Value |
|---|---|
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | Null |
| Screen Display Format | |
| N/A | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | If not NULL populate and protect the OPAC_Flag field on the Tel_Maint_Control table. |
| Tab Position | N/A |

Table 2.6 - Detailed Processing Logic for the Telecommunications Interface CTL File Name Maintenance Table

### *2.1.7.3 Security*

The existing CAMS/CFS menu security and the CAMS/CFS database roles will be used for implementing the security on the new screens and the objects developed, respectively.

### *2.1.7.4 Error Handling Messages*

The following table lists the main error and warning messages applicable to the TEL001 screen.

| Message No. | Type | Text |
|---|---|---|
| 1 | Error | Interface File Type must be entered. |
| 2 | Error | Invoice Type must be entered. |
| 3 | Error | Item Type must be entered. |
| 4 | Error | File Format must be entered. |
| 5 | Error | Input Vendor Code must be entered. |
| 6 | Error | CAMS/CFS Vendor Name must be entered. |
| 7 | Error | CAMS/CFS Vendor Number must be entered. |
| 8 | Error | CAMS/CFS Vendor ID must be entered. |
| 9 | Error | The record cannot be activated because the control block values entered are not unique. |
| 10 | Error | The record cannot be activated because no detail block values have been entered. |
| 11 | Error | The record cannot be activated because no active vendor record exists. |
| 12 | Error | Changes cannot be made to an active record. |
| 13 | Error | Field is not enterable. |
| 14 | Error | The control block cannot be deleted. |
| 15 | Error | The detail block of an active record cannot be deleted. |

| Message No. | Type | Text |
|---|---|---|
| 16 | Error | The load process did not execute successfully. The file format specified does not match any established input file format. |
| **17** | **Error** | **The record cannot be activated when both Input Data Record Formats are set to 'N'.** |

Table 2.7 - Main Error and Warning Messages for the TEL001 Screen.

### *2.1.7.5 Output*

This section lists the database tables that will be affected by the actions executed on the TEL001 screen and any output files that will be produced. The table below lists the database tables where the TEL001 screen is creating, updating or deleting data.

| Table Name | Insert | Update | Delete | Comments |
|---|---|---|---|---|
| Tel_Maint_Control | Yes | Yes | Yes | Base table |
| Tel_Maint_Vendor | Yes | Yes | Yes | Base table |

Table 2.8 - Output Tables Affected by the TEL001 Screen.

### *2.1.7.6 Reports*

No reports will be generated through the actions executed on the TEL001 screen.

## *2.1.8 Requirements Met in Previous Section*

No specific requirements were met in this section. The TEL001 screen functions as the main support mechanism for all of the Telecommunications Interface processing.

# 3 Core Financial System (CFS) Set-Up

The following sections describe data maintenance values that will be added to existing CFS maintenance tables. The data setup described below will assist the Telecommunications Interface with locating and generating unique invoice and estimated accrual records.

The Telecommunications Interface does not require any database changes to existing CAMS/CFS tables, only the manual creation of new maintenance data. Therefore, the specific data values will not be discussed within this detailed design, but will be developed and documented with CAMS/CFS functional experts at later date.

## 3.1 GL021 - Accounting System Code Maintenance

Maintenance values will have to be added to the GL021 Accounting System Code Maintenance screen. The data elements entered on the GL021 screen will ensure the records processed through the Telecommunications Interface are easily distinguishable within CAMS/CFS. The data elements will include Interface Types, Invoice Types, Item Types and Interface Directory Identifiers.

## 3.2 INT001 - Interface File Location

Maintenance values will have to be added to the INT001 Interface File Location maintenance screen. The data elements entered on the INT001 screen will associate end-users with the Telecommunications Interface and direct the input, output and report directories for the processed data batches.

## 3.3 PM021 - Payment Document Matching Maintenance Screen

Maintenance values will have to be added to the PM021 Payment Document Matching Maintenance screen. The data elements entered on the PM021 screen will define the supporting transactions and documents that are necessary for the disbursement of the Telecommunications Interface processed invoice records.

## 3.4 Telecommunications Interface Input Maintenance Table Setup

### *3.4.1 CTL File Definitions*

The Telecommunications Interface will utilize a SQL*Loader to transfer all input data batches into Oracle intermediary tables for further processing. The SQL*Loader requires two primary files in order for the load to be successful; the data file which in our case is the input data batch and a control file. The control (CTL) file tells Oracle how to read and load the data. It tells the SQL*Loader

where to find the source data, where to load the data and information on the format of the data.

Individual CTL files will need to be created for each of the flat file Input File Formats as listed in Section 4.4.2.3 (Data Input File and Table Formats Load Mapping). In addition, PL/SQL routines will have to be developed to generate temporary tables and to move data values between flat files and temporary tables, and between unique temporary tables. Detailed information about the load routine is documented in Section 4.4.2 (Load Telecom Input File).

# 4 Telecommunications Interface Invoice Generation

## 4.1 Purpose of Telecommunications Interface Invoice Generation

All data source files will be processed through the TEL201 (Telecommunications Interface Invoice Initiation Screen) which will be used to initiate the invoice generation process. The invoice generation processes will perform multiple operations:

- It is through this process that external telecommunications charges are received, processed and eventually fed into the CFS.
- This process will successfully process positive and negative individual line items as well as overall invoice records.
- The invoice records generated through this process will be used as base data sources for telecommunication estimated accrual generation processing.
- The process provides the AP Standard Interface with the matching criterion necessary to match actual invoice records with estimated accrual shell invoices.
- The process provides the capability to attach schedule numbers to interfaced vendor invoice records. This process is handled through a combination of the TEL201 screen and the TEL201a Telecommunications Interface 'G' Schedule Selection Pop-Up processes.

The Telecommunications Interface Invoice Generation Process is comprised of multiple sub-processes. The process flow diagrams, Figure 3.0 and 4.0, detail the sub-processes executed during the Telecommunications Interface Invoice Generation processing.

## 4.2 Process Flow of Telecommunications Interface Invoice Generation

The following diagrams illustrate the typical Telecommunications Interface Invoice Generation processes flow as outlined in the listing below:

1. Load telecommunications input files
2. Validate vendor information
3. Generate vendor crosswalk status report
4. Generate an Accounts Payable (AP) transaction number temporary table
5. Match input file records and AP transaction numbers
6. Query the 'G' schedule number (if applicable)
7. Crosswalk the FIMA to CAMS/CFS ACCS values (if necessary)
8. Assign default invoice values
9. Generate the telecommunications interface output table
10. Generate the invoice generation processing report

As depicted above an input data batch that contains vendor invoice records will be affected by each of the 11 sub-processes. The output of the load process will be three temporary tables (Tel_Inv_Header, Tel_Inv_Control and Tel_Inv_Detail). These three temporary tables will be manipulated throughout the invoice generation processing of the Telecommunications Interface until the final sub-process where the data values captured in the temporary tables will be copied into permanent tables for further processing by the Standard Interface.

Throughout this document the temporary tables will be referred to by different names that reflect the current stage of invoice generation processing. It is important to understand that the temporary tables have not changed only the values captured in the tables.

### *4.2.1 Telecommunications Interface High Level Process Flow*

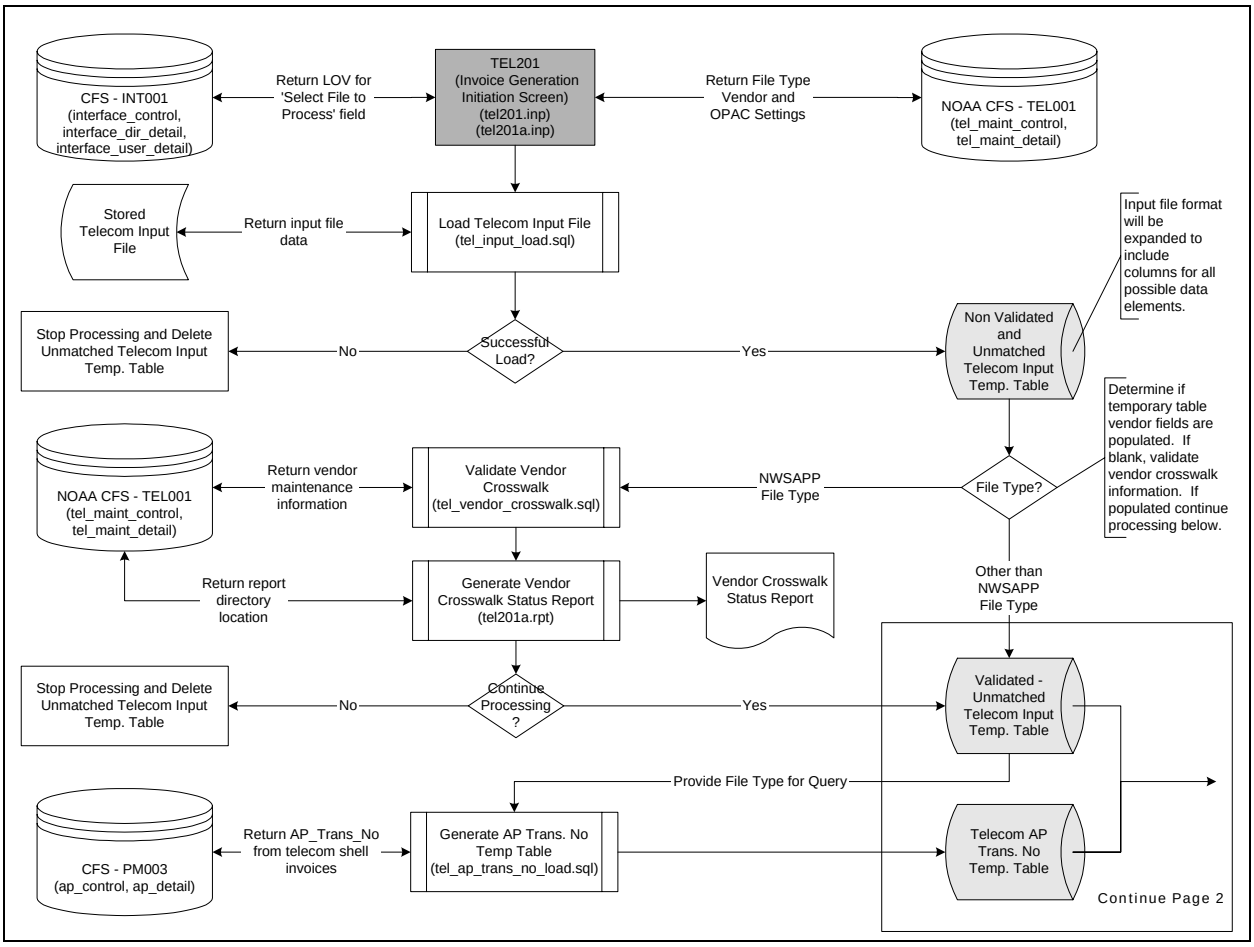



Figure 3.0 - Invoice Generation Process Flow Page 1

### *4.2.2 Telecommunications Interface High Level Process Flow*

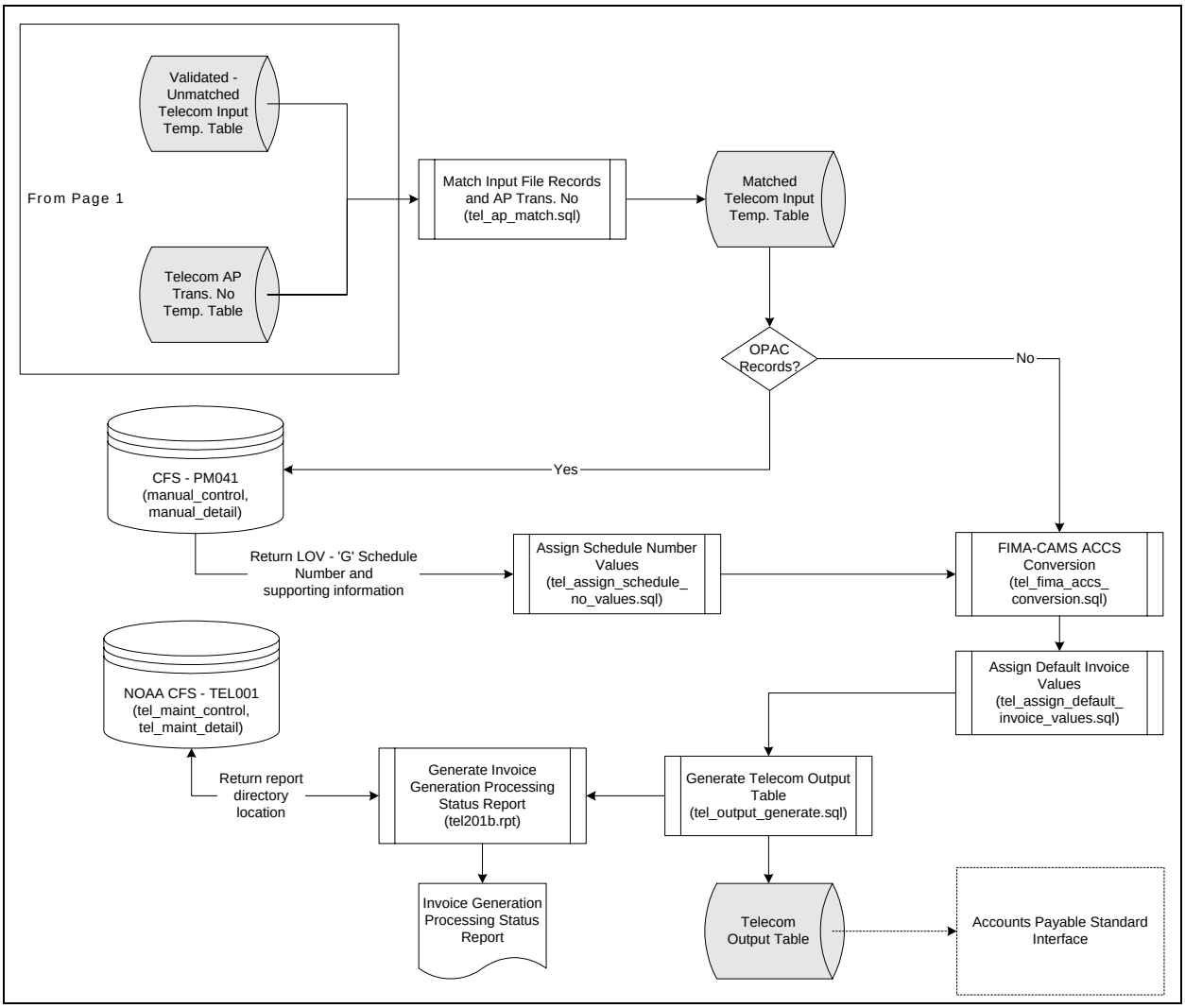



Figure 4.0 - Invoice Generation Process Flow Page 2

## 4.3 Input to Telecommunications Interface Invoice Generation

### *4.3.1 Data Input File Sources*

The Telecommunications Interface is designed to process external telecommunication charges records from a multitude of data sources. The organizations that control the data sources will transfer the data files to the appropriate directory on the GS140 or electronically transfer the data to an AOD technician who will place a flat file in the appropriate directory for processing.

### *4.3.2 Data Input File Formats*

For the purposes of the Telecommunications Interface 'File Format' will be defined as the physical structure of a data batch flat file or table. At the highest level there are input and output 'File Formats'. The 'Input File Format' refers to the data batches of telecommunications charges processed by telecommunication data sources. The document table below depicts the anticipated file format, their physical structure and their source.

The 'Input File Formats' that include FIMA are currently being used in production environments. The 'Input File Formats' that include CAMS are suggested file formats that may be deployed in production.

| Input File Format | Data Structure | Data Source |
|---|---|---|
| NWSAPP - FIMA | Flat File | National Weather Service Automated Payment Program (NWSAPP) |
| NWSAPP - CAMS | Flat File | NWSAPP |
| TELOPS - CAMS | Table | TELOPS |
| BAC - FIMA | Flat File | National Weather Service (NWS) |
| BAC - CAMS | Flat File | NWS |
| DOT - FIMA | Flat File | Department of Transportation (DOT) |
| DOT - CAMS | Flat File | DOT |
| NLSC - CAMS | Table | National Logistics Support Center (NLSC) |
| Excel Spreadsheet - FIMA | Flat File | Various |
| Excel Spreadsheet - CAMS | Flat File | Various |

Table 4.0 - Input File Formats

The 'Output File Format' refers to the generic table structure where all invoice records will be processed by the Telecommunications Interface. That table

structure is discussed in Section 4.4.2.2 (Processing Logic of the Non-Validated and Unmatched Telecom Input Temporary Table).

The data mapping of the 'Input File Formats' to the 'Output File Formats' is discussed in Section 4.4.2.3 (Data Input File and Table Formats Load Mapping).

### *4.3.3 Requirements Met in the Previous Section*

The document table below lists the requirements met by the detailed design. The table references the Telecommunications Interface Services Requirements Version 5.2 for the requirement number, applicable page number and description of the requirement.

| Requirement Number | Page | Description |
|---|---|---|
| DI - 1 | 10 | The Telecommunications Interface will accept the current GSA BAC file format. |
| DI - 2 | 10 | The Telecommunications Interface will accept the TELOPS system file format. |
| DI - 3 | 10 | The Telecommunications Interface will accept the NWSAPP system file format. |
| DI - 4 | 11 | The Telecommunications Interface will accept the Department of Transportation (DOT) file format for non-telecommunication expenses. |
| DI - 5 | 11 | The Telecommunications Interface will provide a generic file format for future disbursement input files. |
| DI - 6 | N/A | NEW REQUIREMENT - The Telecommunications Interface will accept and process the NLSC shipping costs manifest for Fedex/UPS. |
| CP - 14 | 16 | The Telecommunications Interface will process credits and debits for all file types. |

Table 4.1 - Requirements Met in the Previous Section

## 4.4 Telecommunications Interface Invoice Generation Sub-Processing Logic

### *4.4.1 TEL201 - Invoice Generation Initiation Screen*

#### *4.4.1.1 Form Layout*

The TEL201 screen will be developed as a Character screen using Oracle Forms Version 3.0. The TEL201 screen is used to execute the invoice generation processing. The execution routine called by this screen will call all of the routines necessary to complete the processing of the input data batch records into Standard Interface ready invoice records. The screen is comprised of one data block that is used to enter processing criteria. All data input files will be processed through this screen.

#### *4.4.1.1.1 TEL201 - Invoice Generation Initiation Screen Layout*

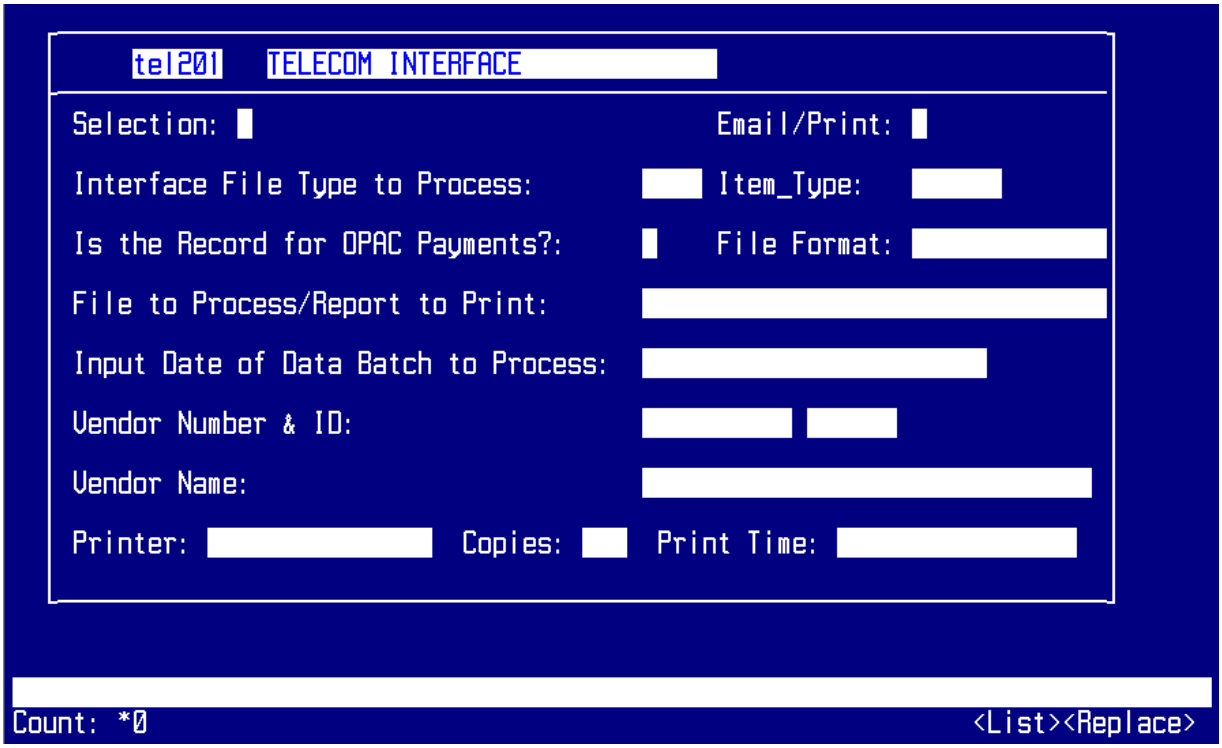



Figure 5.0 - TEL201 - Invoice Generation Initiation Screen Layout

#### *4.4.1.2 Operating Rules*

The following sections describe the operating rules applicable to the TEL201 screen. Operating Rules differ from business rules in that they are directly associated with a particular operation as opposed to business rules that are associated more generally with the whole application.

##### *4.4.1.2.1 Create a Record (Initiate the Invoice Generation Process)*

- Users are allowed to select the interface file type from a list of values.
- Users are allowed to select the interface item type from a list of values based upon the interface file type and interface file format selected.
- Users are allowed to select the interface file format from a list of values based upon the interface file type selected.
- **If the TEL001 maintenance record for the selected interface file type is set to accept flat files the users are allowed to select the actual file to process from a list of values based on the interface file type chosen.**

- If the TEL001 maintenance record for the selected interface file type is set to accept flat files the users will not be able to select the batch number from a list of values based on the interface file type chosen.
- If the TEL001 maintenance record for the selected interface file type is set to accept Oracle Intermediary tables the users are allowed to select the batch number to process from a list of values based on the interface file type chosen.
- If the TEL001 maintenance record for the selected interface file type is set to accept Oracle Intermediary tables the users will not be able to select the actual file from a list of values based on the interface file type chosen.
- The 'Vendor' information and 'OPAC' status fields are not enterable.
- Users are able to e-mail or print current processing status reports.
- Users are able to e-mail or print previously generated Vendor Invoice Processing Status Reports and Vendor Crosswalk Status Reports from the initiation screen.

#### *4.4.1.2.2 Modify a Record*

Users are not allowed to modify a record on this screen.

#### *4.4.1.2.3 Save a Record*

Users are not allowed to save a record in this screen.

#### *4.4.1.2.4 Delete a Record*

Users are not allowed to delete a record on this screen.

#### *4.4.1.2.5 Queries*

Users are not allowed to query on this screen.

### *4.4.1.3 Business Rules*

The following sections describe the business rules applicable to the TEL201 screen.

- The TEL201 screen will be used to process all invoice records.
- Only the specified input file formats will be loaded by the TEL201 screen.
- Only authorized and established end-users will have access to this screen.
- Input data batches must be placed in the correct directory as established on INT001 for the Interface Type.

- All input data batches that utilize an Oracle intermediary table must use the same table name as recorded in the CTL file.

#### *4.4.1.4 Input*

The following sections list all tables needed prior to executing the invoice generation process from the TEL201 screen. The table below lists the database tables where the screen is obtaining the information.

| Table Name | Screen | Usage | Record Requirement |
|---|---|---|---|
| Tel_Maint_Control | TEL001 | LOV | Interface File Types from active and valid header records |
| Tel_Maint_Vendor | TEL001 | Text Box | Associated vendor information of selected interface file type and OPAC status |
| Interface_Control | INT001 | Reference | Active and valid item type |
| Interface_Dir_Detail | INT001 | Reference | Active and valid directory locations |
| Interface_User_Detail | INT001 | Reference | Active and valid employee records |
| Parameter | N/A | Store Screen Values | N/A |

Table 4.2 - TEL201 (Telecommunications Interface Invoice Initiation Screen) Input

#### *4.4.1.5 Processing Logic for the TEL201 Screen*

##### *4.4.1.5.1 TEL201 Screen Processing Logic Overview*

The following document table lists all screen labels and applicable field names (non-base table) within the TEL201 screen. All values will be captured in the parameter table.

| Screen Label | Field Name | Type and Size |
|---|---|---|
| Selection | Selection | Varchar2(1) |
| Email/Print | Report_Form | Varchar2(1) |
| Select Interface File Type to Process | Select_Interface_File_Type | Varchar2(4) |
| Select Interface Item Type to Process | Select_Interface_Item_Type | Varchar2(6) |
| Select Interface File Format to Process | Select_Interface_File_Format | Varchar2(13) |
| Select File to Process/Report to Print | Select_File_To_Process | Varchar2(16) |
| Select Input Date of Data Batch to Process | Select_Input_Date | Varchar2(30) |
| Vendor Record(s) to Be Applied to File | Selected_Vendor_Number | Number(10) |
| N/A | Selected_Vendor_ID | Number(6) |
| N/A | Selected_Vendor_Name | Varchar2(30) |
| Is the Record to be Processed for OPAC Payments? | Selected_OPAC_Flag | Varchar2(1) |

| Screen Label | Field Name | Type and Size |
|---|---|---|
| Printer | Printer | Varchar2(15) |
| Copies | Copies | Number (3) |
| Print Time | Print_Time | Varchar2(20) |

Table 4.3 - Overview of the Processing Logic for the TEL201 Screen

#### *4.4.1.5.2 TEL201 Screen Processing Logic Detail Review*

The following sections describe the field descriptions and the processing logic for each field associated with the TEL201 screen.

| Field Property | Property Value |
|---|---|
| Screen Label | Selection |
| Purpose | This field captures processing selection criterion of the end-user. The user will be able to select whether they wish to process a vendor invoice data batch or print the processing status reports from a previous execution of the Telecommunications Interface vendor invoice initiation process. |
| Field Name | Selection |
| Table Name | N/A |
| Displayed | Yes |
| Format | Only display number of selection criterion. |
| Required | Value must be selected prior to execution of the process. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Screen Display Format | |
| List Box | '1 - Process Vendor Invoice Data Batch'<br>'2 - Generate Report from Previous Execution' |
| Processing Logic | |
| Validation Check | See List Box |
| Validation Rules | See List Box, Format and Required |
| Tab Position | 1 |

| Field Property | Property Value |
|---|---|
| Screen Label | Email/Print |
| Purpose | This field captures the output report format selection criterion of the end-user. The user will be able to select whether they wish to print the report directly from the screen at the conclusion of processing or e-mail the report to their e-mail account. |
| Field Name | Report_Form |
| Table Name | N/A |
| Displayed | Yes |
| Format | Only 'E' or 'P' allowed. |
| Required | Value must be selected prior to execution of the process. |
| System Generated | No |

| Field Property | Property Value |
|---|---|
| Primary Key | No |
| Unique | No |
| Default Value | 'E' |
| Screen Display Format | |
| List Box | 'E - E-mail report to account'<br>'P - Send report to printer' |
| Processing Logic | |
| Validation Check | See List Box |
| Validation Rules | See List Box, Format and Required |
| Tab Position | 2 |

| Field Property | Property Value |
|---|---|
| Screen Label | Select Interface File Type to Process |
| Purpose | This field captures all active interface file types that have been established for the end-user on the INT001 and TEL001 screens. The end user must select the interface file type to process. |
| Field Name | Select_Interface_File_Type |
| Table Name | N/A |
| Displayed | Yes |
| Format | N/A |
| Required | Value must be selected prior to execution of the process. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Screen Display Format | |
| LOV | Return all values for Interface_Type with an Active_Status = 'Y' from the Interface_Control table on screen INT001 where the Emp_No of the end-user has been established in the Emp_No field with an Active_Status ' 'Y' from the Interface_User_Detail table on screen INT001 and File_ID = 'INPUT' from the Interface_Dir_Detail table on the screen INT001.<br><br>Union<br><br>Return all values for Interface_File_Type with an Active_Status = 'Y' from the Tel_Maint_Control table on screen TEL001. |
| Processing Logic | |
| Validation Check | See LOV |
| Validation Rules | See LOV and Required |
| Tab Position | 3 |

| Field Property | Property Value |
|---|---|
| Screen Label | Select Interface Item Type to Process |
| Purpose | This field captures all active item types as entered on TEL001 for the selected interface file type and file format. The end user must select the item type to process. |
| Field Name | Select_Interface_Item_Type |

| Field Property | Property Value |
|---|---|
| Table Name | N/A |
| Displayed | Yes |
| Format | N/A |
| Required | Value must be selected prior to execution of the process. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Screen Display Format | |
| LOV | Return all values for Item_Type from the Tel_Maint_Control table where the global variable for the Select_Interfce_File_Type on the TEL203 screen is equal to the Interface_File_Type respectively and the Active_Status is equal to 'Y' as entered on the Tel_Maint_Control table on screen TEL001.<br><br>If only one record is returned in the LOV populate the Select_Interface_Item_Type with that value.<br><br>If more than one record is returned in the LOV, require the user to select a value. |
| Processing Logic | |
| Validation Check | See LOV |
| Validation Rules | See LOV and Required |
| Tab Position | 4 |

| Field Property | Property Value |
|---|---|
| Screen Label | Select Interface File Format to Process |
| Purpose | This field captures all active interface file formats entered on TEL001 for the selected interface file type. The end user must select the interface file format to process. |
| Field Name | Select_Interface_File_Format |
| Table Name | N/A |
| Displayed | Yes |
| Format | N/A |
| Required | Value must be selected prior to execution of the process. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Screen Display Format | |

| Field Property | Property Value |
|---|---|
| LOV | Return all values for File_Format from the Tel_Maint_Control table where the global variable for the Select_Interfce_File_Type and Select_Inteface_Item_Type on the TEL203 screen is equal to the Interface_File_Type and Item_Type respectively and the Active_Status is equal to 'Y' as entered on the Tel_Maint_Control table on screen TEL001.<br><br>If only one record is returned in the LOV populate the Select_Interface_File_Format with that value.<br><br>If more than one record is returned in the LOV, require the user to select a value. |
| Processing Logic | |
| Validation Check | See LOV |
| Validation Rules | See LOV and Required |
| Tab Position | 5 |

| Field Property | Property Value |
|---|---|
| Screen Label | Select File to Process/Report to Print |
| Purpose | If the end-user selects option 1 (Process Vendor Invoice) in the Selection field this field captures all file names in the determined directory based upon the selected interface file type setup on TEL001 and INT001. The end user must select the file to process.<br><br>If the TEL001 maintenance record is set to accept input *table* formats then this field will *not be* enterable. If the TEL001 maintenance record is set to accept input *file* formats then this field will *be* enterable.<br><br>If the end-user selects option 2 (Generation Previous Execution Report) in the Selection field this field captures all report names in the determined directory based upon the selected interface file type setup on TEL001 and INT001. The end user must select the report to print. |
| Field Name | Select_File_To_Process |
| Table Name | N/A |
| Displayed | Yes |
| Format | N/A |
| Required | If the end-user selects option 1 (Process Vendor Invoice) in the Selection field this value must be selected prior to execution of the process if the Record Format ASCII field on the Tel Maint Control table associated with the TEL001 screen for the selected interface file type is set to 'Y'.<br><br>If the end-user selects option 1 (Process Vendor Invoice) in the Selection field and if the Record_Format_Table field on the Tel_Maint_Control table associated with the TEL001 screen for the selected interface file type is set to 'Y' then this field is not required. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Screen Display Format | |

| Field Property | Property Value |
|---|---|
| LOV | If the end-user selects option 1 (Process Vendor Invoice) in the Selection field return all file names as established in the Directory_Location for the File_ID = 'Input' from the Interface_Dir_Detail table on the screen INT001 where the Interface_Type and File_Format from the Interface_Control table on screen INT001 is equal to the selected interface file type and selected interface file format respectively. The selected interface file type and selected interface file format will have an Active_Status = 'Y' and Record_Format_ASCII = 'Y' from the Tel_Maint_Control table on screen TEL001.<br><br>If the end-user selects option 2 (Generation Previous Execution Report) in the Selection field return all report file names as established in Directory_Location for the File_ID = 'Report' from the Interface_Dir_Detail table on the screen INT001 where the Interface_Type and File_Format from the Interface_Control table on screen INT001 is equal to the selected interface file type and selected interface file format respectively. The selected interface file type and selected interface file format.<br><br>When executed report files will be sent to the Unix printer as established for the end-user User ID. |
| Processing Logic | |
| Validation Check | See LOV |
| Validation Rules | See LOV and Required |
| Tab Position | 6, If **Select_Input_Date** is not accessible. |

| Field Property | Property Value |
|---|---|
| Screen Label | Select Input Date of Data Batch to Process |
| Purpose | This field captures the external 'Batch Number' of the input data batch. The external 'Batch Number' for the Telecommunications Interface will be equal to the Modification_Date from the input data batch. The Modification_Date will capture the date and the time that the input data source transferred their input data into the input data batch table for processing by the Telecommunications Interface. The end user must select the file to process.<br><br>If the TEL001 maintenance record is set to accept *file* formats then this field will *not be* enterable. If the TEL001 maintenance record is set to accept *table* formats then this field will *be* enterable.<br><br>This field will include date and hour values only within the input data batch table and will only be used to differentiate records prior to the pre-Telecommunications Interface invoice generation processing. |
| Field Name | **Select_Input_Date** |
| Table Name | **N/A** |
| Displayed | **Yes** |
| Format | **DD-MON-RRRR HH:MM:SS** |

| Field Property | Property Value |
|---|---|
| Required | **If the end-user selects option 1 (Process Vendor Invoice) in the Selection field the value must be selected prior to execution of the process if the Record_Format_Table field on the Tel_Maint_Control table associated with the TEL001 screen for the selected interface file type is set to 'Y'.**<br><br>**If the Record_Format_ASCII field on the Tel_Maint_Control table associated with the TEL001 screen for the selected interface file type and selected interface file format is set to 'Y' then this field is not required.**<br><br>**If the end-user selects option 2 (Generation Previous Execution Report) in the Selection field this field will not be accessible.** |
| System Generated | Yes. Set as TRUNC(SYSDATE). |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Screen Display Format | |
| LOV | **Return all distinct values in the Modification_Date column on the input data batch table.** |
| Processing Logic | |
| Validation Check | See LOV |
| Validation Rules | See LOV and Required |
| Tab Position | 6, If **Select_File_To_Process** is not accessible. |

| Field Property | Property Value |
|---|---|
| Screen Label | Vendor Record(s) to Be Applied to File |
| Purpose | This non-enterable field captures the CFS Vendor Number associated with the returned input vendor code as established on TEL001. If more than one input vendor code is established on TEL001 this field will not be populated. |
| Field Name | Selected_Vendor_Number |
| Table Name | N/A |
| Displayed | Yes |
| Format | N/A |
| Required | **N/A** |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Screen Display Format | |
| Text Box | ▸ **If the end-user selects option 1 (Process Vendor Invoice) in the Selection field** return CFS_Vendor_Number from the Tel_Maint_Vendor table of screen TEL001 where the Selected_Vendor_Name is equal to the to the Input_Vendor_Code on Tel Maint Vendor on screen TEL001.<br>▸ **If the end-user selects option 2 (Generation Previous Execution Report) in the Selection field this field will not be populated**. |
| Processing Logic | |
| Validation Check | See Text Box |
| Validation Rules | See Text Box |

| Field Property | Property Value |
|---|---|
| Tab Position | N/A |

| Field Property | Property Value |
|---|---|
| Screen Label | N/A |
| Purpose | This non-enterable field captures the CFS Vendor ID associated with the returned input vendor code as established on TEL001. If more than one input vendor code is established on TEL001 this field will not be populated. |
| Field Name | Selected_Vendor_ID |
| Table Name | N/A |
| Displayed | Yes |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Screen Display Format | |
| Text Box | ▸ **If the end-user selects option 1 (Process Vendor Invoice) in the Selection field** return CFS_Vendor_ID from the Tel_Maint_Vendor table of screen TEL001 where the Selected_Vendor_Name is equal to the to the Input_Vendor_Code on Tel_Maint_Vendor on screen TEL001.<br>▸ **If the end-user selects option 2 (Generation Previous Execution Report) in the Selection field this field will not be populated**. |
| Processing Logic | |
| Validation Check | See Text Box |
| Validation Rules | See Text Box |
| Tab Position | N/A |

| Field Property | Property Value |
|---|---|
| Screen Label | N/A |
| Purpose | This non-enterable field captures the input vendor code based upon the selected interface file type setup on TEL001. If more than one input vendor code is established on TEL001 this field will be populated with 'Based on Input File'. |
| Field Name | Selected_Vendor_Name |
| Table Name | N/A |
| Displayed | Yes |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Screen Display Format | |

| Field Property | Property Value |
|---|---|
| Text Box | ▸ **If the end-user selects option 1 (Process Vendor Invoice) in the Selection field** return Input_Vendor_Code from the Tel_Maint_Vendor table on screen TEL001 where the Select_Interface_File_Type and the Select_Interface_File_Format is equal to the Interface_File_Type and the File_Format respectively on Tel_Maint_Control on screen TEL001 where that record is active.<br>▸ **If the end-user selects option 2 (Generation Previous Execution Report) in the Selection field this field will not be populated**. |
| Processing Logic | |
| Validation Check | See Text Box |
| Validation Rules | See Text Box |
| Tab Position | N/A |

| Field Property | Property Value |
|---|---|
| Screen Label | N/A |
| Purpose | This non-enterable field captures the OPAC Status of the maintenance record associated with the returned input vendor code as established on TEL001. |
| Field Name | Selected_OPAC_Flag |
| Table Name | N/A |
| Displayed | Yes |
| Format | Only 'Y' or 'N' allowed. |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Screen Display Format | |
| Text Box | ▸ **If the end-user selects option 1 (Process Vendor Invoice) in the Selection field** return OPAC_Flag from the Tel_Maint_Vendor table of screen TEL001 where the Selected_Vendor_Name is equal to the to the Input_Vendor_Code on Tel_Maint_Vendor on screen TEL001.<br>▸ **If the end-user selects option 2 (Generation Previous Execution Report) in the Selection field this field will not be populated.** |
| Processing Logic | |
| Validation Check | See Text Box |
| Validation Rules | See Text Box and Format |
| Tab Position | N/A |

| Field Property | Property Value |
|---|---|
| Screen Label | Printer |
| Purpose | This field captures the default UNIX printer as established for the end-user. |
| Field Name | Printer |
| Table Name | N/A |
| Displayed | Yes |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |

| Field Property | Property Value |
|---|---|
| Primary Key | No |
| Unique | No |
| Default Value | Default UNIX printer of the end-user |
| Screen Display Format | |
| LOV | All available UNIX printers |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | This field is only available if the end-user select option ‘2' in the Selection field and option ‘P’ from the Report_Form field. |
| Tab Position | 7, if the end-user select option ‘2' in the Selection field and option ‘P’ from the Report_Form field. |

| Field Property | Property Value |
|---|---|
| Screen Label | Copies |
| Purpose | This field captures the number of copies that will be sent to the selected printer. |
| Field Name | Copies |
| Table Name | N/A |
| Displayed | Yes |
| Format | 999 |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | 1 |
| Screen Display Format | |
| Text Box | Number of copies to be printed. |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | ▸ Cannot be greater than 999.<br>▸ This field is only available if the end-user select option ‘2' in the Selection field and option ‘P’ from the Report_Form field. |
| Tab Position | 8, if the end-user select option ‘2' in the Selection field and option ‘P’ from the Report_Form field. |

| Field Property | Property Value |
|---|---|
| Screen Label | Print Time |
| Purpose | This field captures when the time of the current day when the print job will be executed. |
| Field Name | Print_Time |
| Table Name | N/A |
| Displayed | Yes |
| Format | DD-MON-YYYY |
| Required | Yes |
| System Generated | No |
| Primary Key | No |

| Field Property | Property Value |
|---|---|
| Unique | No |
| Default Value | System Date |
| Screen Display Format | |
| Text Box | Desired time of the current day when the print job will be executed |
| Processing Logic | |
| Validation Check | Cannot be prior to the system time |
| Validation Rules | ▸ Must use military time (e.g 2:00 PM = 14:00)<br>▸ This field is only available if the end-user select option '2' in the Selection field and option 'P' from the Report_Form field. |
| Tab Position | 9, if the end-user select option '2' in the Selection field and option 'P' from the Report_Form field. |

Table 4.4 - Detailed Review of the Processing Logic for the TEL201 Screen

#### *4.4.1.6 Security*

The existing CAMS/CFS menu security and the CAMS/CFS database roles will be used for implementing the security on the new screens and the objects developed, respectively.

#### *4.4.1.7 Error Handling Messages*

The following table lists the main error and warning messages applicable to the TEL201 screen.

| Message No. | Type | Text |
|---|---|---|
| 1 | Error | Interface File Type must be entered. |
| 2 | Error | File to be processed must be entered when the specified Interface File Type requires an ASCII flat file. |
| 3 | Error | File to be processed cannot be entered when the specified Interface File Type requires an Oracle Intermediary table. |
| 4 | Error | Batch Number to be processed cannot be entered when the specified Interface File Type requires an ACSII flat file. |
| 5 | Error | Current report process is still running. Please try again later. |
| 6 | Error | Processing did not complete successfully. Load process encountered an unexpected file format. |
| 7 | Error | Processing did not complete successfully. Load process encountered conflicting ACCS values. |

Table 4.5 - Main Error and Warning Messages for the TEL201 Screen

#### *4.4.1.8 Output*

All data entered or selected on the TEL201 screen will be used as global variables through out the invoice generation processing. At the beginning of processing the global variables will be captured in the Parameter table.

#### *4.4.1.9 Reports*

The TEL201 process will generate two reports. The reports, Vendor Crosswalk Status Report and Invoice Generation Processing Status Report, are discussed in detail in following sections. The reports will be generated, e-mailed or printed and placed in the output directories as established on INT001 for the applicable Interface File Type at the conclusion of processing.

If the end-user elects to print a previously generated Vendor Invoice Processing Status Report or Vendor Crosswalk Status Report the report will be sent to the Unix printer of the end-user based upon User ID.

#### *4.4.1.10 Requirements Met in the Previous Section*

The document table below lists the requirements met by the detailed design. The table references the Telecommunications Interface Services Requirements Version 5.2 for the requirement number, applicable page number and description of the requirement.

| Requirement Number | Page | Description |
|---|---|---|
| O - 1 | 19 | The Telecommunications Interface will allow users to initiate the Telecommunications Interface processes. |

Table 4.6 - Requirements Met in the Previous Section

### *4.4.2 Load Telecom Input File*

The Tel_Input_Load routine is designed to load data from multiple input data files and/or Oracle intermediary tables into a common set of temporary tables (header, control and detail) upon which all Telecommunications Interface processing will be executed. The load routine processes data from all *defined* input file formats. See Section 4.3.2 (Data Input File Formats).

The load routine utilizes SQL*Loader. The SQL*Loader accesses the applicable CTL file, based upon the File Format selected by the end user on the TEL201 Screen. For details of the CTL file processing logic and file definitions refer to Section 2.1.7.2 (Processing Logic for the Telecommunications Interface CTL File Name Maintenance Table) and Section 3.4.1 (CTL File Definitions). The File Format will determine the expected input and output record structure. The routine will initially copy the input data file into an identically structured temporary table. Then using a PL/SQL procedure, assign the input data from the temporary table into the appropriate fields of the non-validated and unmatched telecom input temporary table (header, control and detail).

For situations where the input data is already in a table, a temporary table will not be generated. The PL/SQL procedure will assign the input data from the input table directly into the appropriate fields of the non-validated and unmatched telecom input temporary table (header, control and detail). The PL/SQL procedure will only process input records that do not have a 'Y' in the Processed_Flag field on the input data table.

The load procedure will also determine if there are accrual records included within the input data. The load procedure will access the Transaction_Code column on the input load temporary table for each record that utilizes the NWSAPP file format. It will not load any record that meets the following criteria:

- The File_Format on the Tel_Maint_Control table is equal to 'NWSAPP - FIMA' or 'NWSAPP - CAMS' where the Interface_File_Type on the Tel_Maint_Control table is equal to the global variable for the Select_Interface_File_Type on the TEL201 screen and;
- The Trans_Code column on the NWSAPP input load temporary table contains '10' or '11' in the first two character spaces on the column.

For all successful loads the PL/SQL procedure will assign a Batch_No to the invoice records as they are assigned to the header, control and detail tables of the non-validated and unmatched telecom input temporary table. It will also assign a Trans_No to each invoice record on the Tel_Inv_Control table and its corresponding record on the Tel_Inv_Detail table. Refer to Section 4.4.2.2 (Processing Logic of the Non-Validated and Unmatched Telecom Input Temporary Table) for details about the Batch_No and Trans_No format.

The PL/SQL procedure will also read all of the input data to determine if there are any parent/child relationships that need to be established between the Tel_Inv_Control and Tel_Inv_Detail table. The procedure will access the Reference_No, Invoice_Date and Vendor_Code columns on the Tel_Inv_Control table to determine if there are any duplicate combinations of the three columns.

If duplicate combinations are detected the detail records for each will be assumed to be a 'child' of the first control record (parent). The Detail_Seq_No and Item_No on the Tel_Inv_Detail table and the Line_Item_Count on the Tel_Inv_Control table will be updated based on the relationship. The duplicate control records will be removed from the Tel_Inv_Control table.

If duplicate combinations are not detected the Telecommunications Interface will assume that each input record is a separate invoice record.

The data source input record batch will remain in the input directory (for flat files) or in the input Oracle intermediary table (for tables) until the entire

Telecommunications Interface processing is complete. At the conclusion of processing the input data batch will be archived in the archive directory if the input data batch is a flat file. If the input data batch is an Oracle intermediary table the input data will be maintained in the table. At the conclusion of processing the Processed_Flag will be updated to 'Y'. Please refer to Section 4.4.10.2 (Processing Logic of the Tel_Assign_Default_Invoice_Values_Routine) for more information about this process. Flat file input data batches will be maintained within the archive directory for three years. The directory locations are maintained on the INT001 screen based upon the interface file type.

The non-validated and unmatched telecom input temporary table is manipulated and refined throughout the Telecommunications Interface process. At the conclusion of processing the temporary table data is captured in an Oracle Intermediary table for further processing by the Standard Interface.

#### *4.4.2.1 Input*

The following sections list all tables needed prior to the execution of the Tel_Input_Load routine. The table below lists the database tables that will be accessed by the load routine.

| Table Name | Screen | Usage | Record Requirement |
|---|---|---|---|
| Tel_Inv_Header | N/A | Temporary Transaction Table | Record values captured in the header table of the non-validated and unmatched telecom input temporary table |
| Tel_Inv_Control | N/A | Temporary Transaction Table | Record values captured in the control table of the non-validated and unmatched telecom input temporary table |
| Tel_Inv_Detail | N/A | Temporary Transaction Table | Record values captured in the detail table of the non-validated and unmatched telecom input temporary table |
| Tel_Maint_Control | TEL001 | Reference | Interface File Types from active and valid header records |
| Tel_Maint_Vendor | TEL001 | Reference | Associated vendor information of selected interface file type and OPAC status |
| Interface_Control | INT001 | Reference | Active and valid item type |
| Interface_Dir_Detail | INT001 | Reference | Active and valid employee records |
| Interface_User_Detail | INT001 | Reference | Active and valid directory locations |
| Tel_Maint_Input | N/A | Reference | Valid input information (CTL table name and PL/SQL routines) |
| Parameter | N/A | Store Screen Values | N/A |

Table 4.7 - Tel_Input_Load Routine Input Tables

#### *4.4.2.2 Processing Logic of the Non-Validated and Unmatched Telecom Input Temporary Table*

The following tables describe the field descriptions of the non-validated and unmatched telecom input temporary table. The header, control and detail table structures mimic that of the Standard Interface Vendor Invoice Transaction Intermediary tables that are associated with the CAMS/CFS PM003 screen. The non-validated and unmatched telecom input temporary table also includes columns to capture input record specific information such as the FIMA accounting codes and other values that would not normally be captured within the Standard Interface Vendor Invoice Transaction Intermediary tables.

##### *4.4.2.2.1 Tel_Inv_Header Table Overview*

The document table below describes the header table of the non-validated and unmatched telecom input temporary table Tel_Inv_Header.

| Field Name | Type and Size | Description |
|---|---|---|
| Batch_No | Number | Sequence generated batch number of the Vendor Invoice Transaction data batch. Primary Key of the table. |
| Interfacing_System | Varchar2(20) | The interfacing system from which the input data batch is transferred to the Standard Interface. |
| Trans_Count | Number(6) | Number of transactions transferred in the data batch. |
| Batch_Total | Number(13,2) | Total amount of all vendor invoice transactions being transmitted. Should be the total of all Amount fields on the control record types. |
| Office_Code | Varchar2(6) | Payment Office Code for which the data batch is transferred. |
| User_Name | Varchar2(30) | User name of the individual who last modified the invoice record in a financial system. |
| Modification_Date | Date | Date the invoice record was last modified in a financial system. |
| Device_Name | Varchar2(30) | Terminal code (ttye, Windows 98). |

Table 4.8 - Overview Processing Logic for the Non-Validated and Unmatched Telecom Input Temporary Table Header Table (Tel_Inv_Header)

#### *4.4.2.2.2 Tel_Inv_Header Table Detailed Review*

The document table below describes the processing logic for the columns of the header table (Tel_Inv_Header) of the non-validated and unmatched telecom input temporary table that are affected by the load routine. Columns not affected by the load routine are described in later sections.

| Column Property | Property Value |
|---|---|
| Purpose | Primary Key of the table. This field will capture a sequentially generated number that will be applied to all records within the input data batch. Assigned by Tel_Input_Load routine based upon the Standard Interface rules.<br><br>This value can be populated with any value during the load routine. This value will be overwritten during the Tel_Assign_Default_Invoice_Values routine based upon the sequence value as captured in the MSI_M00_HEADER_BATCH_NO_SEQ. |
| Field Name | Batch_No |
| Table Name | Tel_Inv_Header |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | Yes |
| Unique | Yes |
| Default Value | 1 |
| Processing Logic | |
| Validation Check | See Required and Unique |
| Validation Rules | See Required and Unique |

Table 4.9 - Detailed Review Processing Logic for the Non-Validated and Unmatched Telecom Input Temporary Table Header Table (Tel_Inv_Header)

#### *4.4.2.2.3 Tel_Inv_Control Table Overview*

The document table below describes the control table of the non-validated and unmatched telecom input temporary table Tel_Inv_Control.

| Field Name | Type and Size | Description |
|---|---|---|
| Batch_No | Number | Sequence generated batch number of the Vendor Invoice Transaction data batch.<br>Part of the Primary Key of the table. |
| Trans_No | Number(8) | Telecommunications Interface sequentially generated number.<br>Part of the Primary Key of the table. |

| Field Name | Type and Size | Description |
|---|---|---|
| Line_Item_Count | Number(6) | Indicates the total number of line item/MDL records that are associated with the vendor invoice. |
| AP_Trans_No | Number(8) | CAMS/CFS associated vendor invoice transaction number. |
| Bureau_Code | Number(2) | CAMS/CFS bureau code. |
| Invoice_Type | Varchar2(6) | CAMS/CFS invoice type. |
| Invoice_No | Varchar2(20) | The associated invoice number for the vendor invoice. |
| Sub_Invoice_No | Number(4) | Used to reference a single invoice for multiple purchase orders. |
| Vendor_No | Number(10) | CAMS/CFS vendor identification code. |
| Vendor_ID | Number(6) | CAMS/CFS code used to identify a vendor address. |
| Invoice_Date | Date | Transaction Date as supplied on the input record.<br><br>Will be used as the Invoice Date (Invoice_Date) on PM003 (AP_Control) in CAMS/CFS. |
| Received_Date | Date | The date the proper invoice was received. |
| Document_Source | Varchar2(6) | The source document type. |
| Po_Type | Varchar2(6) | The type of document associated with the Document_Source. |
| Po_No | Number(8) | Match document PO Number associated with the vendor invoice. |
| Release_No | Number(3) | PO release number. |
| Approp_Symbol | Varchar2(21) | CAMS/CFS appropriation symbol for making payment to another Federal type vendor via an SF1080/1081. |
| Agency_Location_Code | Varchar2(10) | CAMS/CFS agency location code. |
| Fastpay_Flag | Varchar2(1) | Flag indicating whether the invoice is subject to the Fast Pay. |
| Prompt_Pay_Flag | Varchar2(1) | Flag indicating whether the invoice is subject to the Prompt Pay Act. |
| Net_Days1 | Number(2) | Net payment days for the first set of payment terms. |
| Discount_Flag1 | Varchar2(1) | Indicates whether the discount is a percent (P) or amount (A). |
| Discount_Amount1 | Number(8,3) | The percent or amount of the discount (based on the amount in the Discount_Flag1 field). |
| Discount_Days1 | Number(2) | Discount days for the first set of payment terms. |

| Field Name | Type and Size | Description |
|---|---|---|
| Net_Days2 | Number(2) | Net payment days for the second set of payment terms. |
| Discount_Flag2 | Varchar2(1) | Indicates whether the discount is a percent (P) or amount (A). |
| Discount_Amount2 | Number(8,3) | The percent or amount of the discount (based on the amount in the Discount_Flag2 field). |
| Discount_Days2 | Number(2) | Discount days for the second set of payment terms. |
| Reference_No | Varchar2(20) | FIMA Document Number as supplied on the input record.<br><br>Will be used as the Source Reference Number (Reference_No) on PM003 (AP_Control) in CAMS/CFS. |
| Invoice_Amount | Number(13,2) | The total amount on the invoice from the vendor. |
| Net_Invoice_Amount | Number(13,2) | The total sum of the line item amounts of the invoice.<br><br>Calculated value of all line item amounts (Line_Item_Amount) associated with the vendor invoice. |
| Approved_Flag | Varchar2(1) | Approval status of the vendor invoice. |
| User_Name | Varchar2(30) | User name of the individual who last modified the invoice record in a financial system. |
| Modification_Date | Date | Date the invoice record was last modified in a financial system. |
| Device_Name | Varchar2(30) | Terminal code (ttye, Windows 98). |
| Input_Vendor_Code | Varchar2(16) | Input Vendor Code. |

Table 4.10 - Overview Processing Logic for the Non-Validated and Unmatched Telecom Input Temporary Table Control Table (Tel_Inv_Control)

#### *4.4.2.2.4 Tel_Inv_Control Table Detailed Review*

The document table below describes the processing logic for the columns of the control table (Tel_Inv_Control) of the non-validated and unmatched telecom input temporary table that are affected by the load routine. Columns not affected by the load routine are described in later sections.

| Column Property | Property Value |
|---|---|
| Purpose | The field will be used as the part of the primary key of the input data batch. It will capture a sequentially generated number that will be applied to all records within the input data batch. Foreign key referencing the header table. Assigned by Tel_Input_Load routine based upon the Standard Interface rules.<br><br>This value can be populated with any value during the load routine. This value will be overwritten during the Tel_Assign_Default_Invoice_Values routine based upon the sequence value as captured in the MSI_M00_HEADER_BATCH_NO_SEQ. |
| Field Name | Batch_No |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | Yes |
| Unique | Must be unique from other input data batches. |
| Default Value | 1 |
| Processing Logic | |
| Validation Check | See Required and Unique |
| Validation Rules | See Required and Unique |

| Column Property | Property Value |
|---|---|
| Purpose | The field will be used as the part of the primary key of the initial load of the input data batch. It will generate a unique sequential number that will be applied to the control and corresponding detail record for each invoice record within the input data batch. Will be assigned during the Tel_Input_Load routine. |
| Field Name | Trans_No |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | Yes |
| Unique | Must be unique within the control record during the initial load. |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required and Unique |
| Validation Rules | See Required and Unique |

| Column Property | Property Value |
|---|---|
| Screen Label | N/A |
| Purpose | This field will capture the total number of line items/MDLs that are attached to the invoice record. This field will be calculated based upon the number of detail records associated with the control record. Will be assigned during the Tel_Input_Load routine. |

| Column Property | Property Value |
|---|---|
| Field Name | Line_Item_Count |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | The field will capture the invoice number of the record. This field will be populated by the Tel_Input_Load routine if provided in the input data batch. Only non-OPAC input record formats will include the invoice number. OPAC input record formats will not include an invoice number.<br><br>If the Invoice_No field is NULL after the load routine this field will be populated during the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Invoice_No |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required. |
| Validation Rules | ▸ Invoice_No and Sub_invoice_No combination must be unique.<br>▸ Cannot contain characters '/', '*' or 'RMT'. |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the transaction date of the vendor invoice as supplied on the input data batch. Will be assigned during the Tel_Input_Load routine. |
| Field Name | Invoice_Date |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | DD-MON-RRRR |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |

| Column Property | Property Value |
|---|---|
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the FIMA Document Number of the invoice record. Will be assigned during the Tel_Input_Load routine. |
| Field Name | Reference_No |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the vendor code (vendor name) as recognized by the input data system. The Telecommunications Interface will utilize the crosswalk capability to align the Input_Vendor_Code with the CAMS/CFS Vendor Name, Vendor Number and Vendor ID.<br><br>If available, will be assigned during the Tel_Input_Load routine. |
| Field Name | Input_Vendor_Code |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

Table 4.11 - Detailed Review Processing Logic for the Non-Validated and Unmatched Telecom Input Temporary Table Control Table (Tel_Inv_Control)

#### *4.4.2.2.5 Tel_Inv_Detail Table Overview*

The document table below describes the detail table of the non-validated and unmatched telecom input temporary table Tel_Inv_Detail.

| Field Name | Type and Size | Description |
|---|---|---|
| Batch_No | Number | Sequence generated batch number of the Vendor Invoice Transaction data batch. Part of the Primary Key of the table. |
| Trans_No | Number(8) | Telecommunications Interface sequentially generated number. Part of the primary key of the table. |
| Detail_Seq_No | Number(8) | Vendor Invoice Transaction sequential number. Part of the primary key of the table. |
| Item_No | Number(3) | The item number for the detail line of the vendor invoice. |
| Item_Type | Varchar2(6) | The item type for the detail line of the vendor invoice. |
| Line_No | Number(3) | The Multiple Distribution Line (MDL) number for the detail line of the vendor invoice. |
| RI_Method | Varchar2(1) | Indicates whether the line item is (Q) quantity or (D) dollar based. |
| Default_Matching_Flag | Varchar2(1) | Indicates whether default matching should be used or not. |
| PO_Flag | Varchar2(1) | Indicates whether the vendor invoice should be matched against a Purchase Order document or not. |
| RT_Flag | Varchar2(1) | Indicates whether the vendor invoice should be matched against a Receiving Ticket document or not. |
| AC_Flag | Varchar2(1) | Indicates whether the vendor invoice should be matched against a Acceptance document or not. |
| Prompt_Pay_Type | Varchar2(6) | Prompt pay type for this item. |
| Trade_In | Varchar2(1) | Indicates whether the line item is a trade in or not. |
| V1099_Flag | Varchar2(1) | Indicates whether the line item is included on a vendor 1099 or not. |
| Withhold_Flag | Varchar2(1) | Indicates whether the line item is a withhold item or not. |
| Withhold_Percent | Number(4,2) | Indicates the percent of the line item to withhold. |
| Discount_Flag | Varchar2(1) | Indicates whether the line item is subject to a discount or not. |

| Field Name | Type and Size | Description |
|---|---|---|
| Holdback_Flag | Varchar2(1) | Indicates whether the line item is subject to a holdback or not. |
| Holdback_Amount | Number(13,2) | Indicates the amount of holdback. |
| Holdback_Type | Varchar2(1) | Identifies the type of holdback. |
| Emp_No | Number(6) | Employee number associated with this line item. |
| Fiscal_Year | Number(4) | Fiscal Year as supplied on the invoice record. |
| GL_End_Date | Date | The GL period under which the transaction will fall. |
| Project_Code | Varchar2(7) | Project Code portion of ACCS. |
| Task_Code | Varchar2(3) | Task Code portion of ACCS. |
| Org1_Code | Varchar2(2) | Org1 portion of ACCS. |
| Org2_Code | Varchar2(2) | Org2 portion of ACCS. |
| Org3_Code | Varchar2(4) | Org3 portion of ACCS. |
| Org4_Code | Number(2) | Org4 portion of ACCS. |
| Org5_Code | Number(2) | Org5 portion of ACCS. |
| Org6_Code | Number(2) | Org6 portion of ACCS. |
| Org7_Code | Number(2) | Org7 portion of ACCS. |
| Object1_Code | Number(2) | Object 1 portion of ACCS. |
| Object2_Code | Number(2) | Object 2 portion of ACCS. |
| Object3_Code | Number(2) | Object 3 portion of ACCS. |
| Object4_Code | Number(2) | Object 4 portion of ACCS. |
| User_Define_Accs | Number(6) | User defined portion of ACCS. |
| Qty | Number(9,3) | Quantity for this account distribution. |
| Unit_Price | Number(12,4) | The unit price for this account distribution. |
| Line_Item_Amount | Number(13,2) | Line item amount. |
| Item_Descr | Varchar2(240) | Description of the MDL. |
| Schedule_Type | Varchar2(6) | Type of the SF1166 schedule. |
| Schedule_No | Varchar2(15) | The Schedule Number of the Item/MDL. |
| Schedule_Date | Date | The date of the Schedule Number of the Item/MDL. |
| Payment_Office_Code | Varchar2(6) | Payment Office Code. |
| Center_Code | Varchar2(6) | Center Code. |
| Payment_Enclosure | Varchar2(1) | Payment Enclosure Flag. |
| Payment_Type | Varchar2(6) | Payment Type. |
| User_Name | Varchar2(30) | User name of the individual who last modified the invoice record in a financial system. |
| Modification_Date | Date | Date the invoice record was last modified in a financial system. |
| Device_Name | Varchar2(30) | Terminal code (ttye, Windows 98). |
| FIMA_Org_Code | Varchar2(6) | FIMA Organizational Code. |
| FIMA_Task_Code | Varchar2(6) | FIMA Task Code. |

| Field Name | Type and Size | Description |
|---|---|---|
| FIMA_Phase_Code | Varchar2(2) | FIMA Phase Code. |
| FIMA_Obj_Class | Varchar2(4) | FIMA Object Class. |

Table 4.12 - Overview Processing Logic for the Non-Validated and Unmatched Telecom Input Temporary Table Detail Table (Tel_Inv_Detail)

#### *4.4.2.2.6 Tel_Inv_Detail Table Detailed Review*

The document table below describes the processing logic for the columns of the detail table (Tel_Inv_Detail) of the non-validated and unmatched telecom input temporary table that are affected by the load routine. Columns not affected by the load routine are described in later sections.

| Column Property | Property Value |
|---|---|
| Purpose | The field will be used as the part of the primary key of the input data batch. It will capture a sequentially generated number that will be applied to all records within the input data batch. Foreign key referencing the control table. Assigned by Tel_Input_Load routine based upon the Standard Interface rules.<br><br>This value can be populated with any value during the load routine. This value will be overwritten during the Tel_Assign_Default_Invoice_Values routine based upon the sequence value as captured in the MSI_M00_HEADER_BATCH_NO_SEQ. |
| Field Name | Batch_No |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | Yes |
| Unique | Must be unique from other input data batches. |
| Default Value | 1 |
| Processing Logic | |
| Validation Check | See Required and Unique |
| Validation Rules | See Required and Unique |

| Column Property | Property Value |
|---|---|
| Purpose | The field will be used as the part of the primary key of the initial load of the input data batch. It will generate a unique sequential number that will be applied to the control and corresponding detail record for each invoice record within the input data batch. Will be assigned during the Tel_Input_Load routine. |
| Field Name | Trans_No |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |

| Column Property | Property Value |
|---|---|
| System Generated | Yes |
| Primary Key | Yes |
| Unique | Must be unique within the detail record during initial load. |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required and Unique |
| Validation Rules | See Required and Unique |

| Column Property | Property Value |
|---|---|
| Purpose | The field will be used as the part of the primary key of the processing temporary table. It will capture a sequential number of the vendor invoice records within the input data batch. Will be assigned during the Tel_Input_Load routine. |
| Field Name | Detail_Seq_No |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | Yes |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | The field will capture a unique sequential number that will be applied to the detail record(s) for each parent child relationship within the input data batch. Will be assigned during the Tel_Input_Load routine. |
| Field Name | Item_No |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | The field will capture the Fiscal Year if supplied on the input data batch and will be assigned during the Tel_Input_Load routine. If not supplied on the input data batch this field will be calculated based upon the Invoice_Date on the Tel_Inv_Control table for the applicable record during the Tel_FIMA_ACCS_Conversion routine. |
| Field Name | Fiscal_Year |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | Yes |
| Primary Key | Yes |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the CAMS/CFS Project Code if available from the input record. If not supplied by the Input Data Batch will be assigned during the Tel_FIMA_ACCS_Conversion routine. |
| Field Name | Project_Code |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the CAMS/CFS Level 1 Organization Code if available from the input record. If not supplied by the Input Data Batch will be assigned during the Tel_FIMA_ACCS_Conversion routine. |
| Field Name | Org1_Code |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |

| Column Property | Property Value |
|---|---|
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the CAMS/CFS Level 2 Organization Code if available from the input record. If not supplied by the Input Data Batch will be assigned during the Tel_FIMA_ACCS_Conversion routine. |
| Field Name | Org2_Code |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the CAMS/CFS Level 3 Organization Code if available from the input record. If not supplied by the Input Data Batch will be assigned during the Tel_FIMA_ACCS_Conversion routine. |
| Field Name | Org3_Code |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the CAMS/CFS Level 4 Organization Code if available from the input record. If not supplied by the Input Data Batch will be assigned during the Tel_FIMA_ACCS_Conversion routine. |
| Field Name | Org4_Code |

| Column Property | Property Value |
|---|---|
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the CAMS/CFS Level 5 Organization Code if available from the input record. If not supplied by the Input Data Batch will be assigned during the Tel_FIMA_ACCS_Conversion routine. |
| Field Name | Org5_Code |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the CAMS/CFS Level 6 Organization Code if available from the input record. If not supplied by the Input Data Batch will be assigned during the Tel_FIMA_ACCS_Conversion routine. |
| Field Name | Org6_Code |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the CAMS/CFS Level 7 Organization Code if available from the input record. If not supplied by the Input Data Batch will be assigned during the Tel_FIMA_ACCS_Conversion routine. |
| Field Name | Org7_Code |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the CAMS/CFS Level 1 Object Code if available from the input record. If not supplied by the Input Data Batch will be assigned during the Tel_FIMA_ACCS_Conversion routine. |
| Field Name | Object1_Code |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the CAMS/CFS Level 2 Object Code if available from the input record. If not supplied by the Input Data Batch will be assigned during the Tel_FIMA_ACCS_Conversion routine. |
| Field Name | Object2_Code |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |

| Column Property | Property Value |
|---|---|
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the CAMS/CFS Level 3 Object Code if available from the input record. If not supplied by the Input Data Batch will be assigned during the Tel_FIMA_ACCS_Conversion routine. |
| Field Name | Object3_Code |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the CAMS/CFS Level 4 Object Code if available from the input record. If not supplied by the Input Data Batch will be assigned during the Tel_FIMA_ACCS_Conversion routine. |
| Field Name | Object4_Code |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the disbursement amount of the line item. Will be assigned during the Tel_Input_Load routine. |
| Field Name | Unit_Price |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |

| Column Property | Property Value |
|---|---|
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | The Unit_Price field will accept amounts up to $99,999,999.9999. Any value that is greater than that amount will not be successfully loaded into the Telecommunications Interface for processing. This is due to the format of the Unit_Price field within the Standard Interface, the structure of which we mimicked for the Telecommunications Interface. |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the various data elements that are supplied by the input data sources, but are not readily needed within CAMS/CFS to differentiate the records. The values captured in the field will be accessible to end users for research purposes. Will be assigned during the Tel_Input_Load routine. |
| Field Name | Item_Description |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the FIMA Organizational Code if available from the input record. Otherwise will remain blank. |
| Field Name | FIMA_Org_Code |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |

| Column Property | Property Value |
|---|---|
| Validation Rules | ▸ Field must be 'NULL' if CAMS/CFS ACCS fields (Bureau_Code, Org1 - Org7_Code, Program1 - Program4_Code, Project_Code, Task_Code, Object1 - Object4_Code) are populated.<br>▸ CAMS/CFS ACCS fields (Bureau_Code, Org1 - Org7_Code, Program1 - Program4_Code, Project_Code, Task_Code, Object1 - Object4_Code) must be 'NULL' if FIMA_Org_Code is populated. |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the FIMA Task Code if available from the input record. Otherwise will remain blank. |
| Field Name | FIMA_Task_Code |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | ▸ Field must be 'NULL' if CAMS/CFS ACCS fields (Bureau_Code, Org1 - Org7_Code, Program1 - Program4_Code, Project_Code, Task_Code, Object1 - Object4_Code) are populated.<br>▸ CAMS/CFS ACCS fields (Bureau_Code, Org1 - Org7_Code, Program1 - Program4_Code, Project_Code, Task_Code, Object1 - Object4_Code) must be 'NULL' if FIMA_Task_Code is populated. |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the FIMA Phase Code if available from the input record. Otherwise will remain blank. |
| Field Name | FIMA_Phase_Code |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |

| Column Property | Property Value |
|---|---|
| Validation Rules | ▸ Field must be 'NULL' if CAMS/CFS ACCS fields (Bureau_Code, Org1 - Org7_Code, Program1 - Program4_Code, Project_Code, Task_Code, Object1 - Object4_Code) are populated.<br>▸ CAMS/CFS ACCS fields (Bureau_Code, Org1 - Org7_Code, Program1 - Program4_Code, Project_Code, Task_Code, Object1 - Object4_Code) must be 'NULL' if FIMA_Phase_Code is populated. |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the FIMA_Obj_Class if available from the input record. Otherwise will remain blank. |
| Field Name | FIMA_Obj_Class |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | ▸ Field must be 'NULL' if CAMS/CFS ACCS fields (Bureau_Code, Org1 - Org7_Code, Program1 - Program4_Code, Project_Code, Task_Code, Object1 - Object4_Code) are populated.<br>▸ CAMS/CFS ACCS fields (Bureau_Code, Org1 - Org7_Code, Program1 - Program4_Code, Project_Code, Task_Code, Object1 - Object4_Code) must be 'NULL' if FIMA_Obj_Class is populated. |

Table 4.13 - Detailed Review Processing Logic for the Non-Validated and Unmatched Telecom Input Temporary Table Detail Table (Tel_Inv_Detail)

#### *4.4.2.3 Data Input File and Table Formats Load Mapping*

The document tables below will identify the specific columns on the non-validated and unmatched telecom temporary table where each of the file and table formats will map their input data. Only the columns that will be populated by the load routine will be documented below.

##### *4.4.2.3.1 NWSAPP - FIMA File to Table Load Mapping*

| Input Field Name | File Positions | Temporary Column Name | Output Column Name | Output Table Name |
|---|---|---|---|---|
| Bill Date (mm/dd/yy) | 1 - 8 | Bill_Date | Invoice_Date | Tel_Inv_Control |
| Document Number | 9 - 17 | Document_No | Reference_No | Tel_Inv_Control |
| Fiscal Year (yy) | 18 - 19 | Fiscal_Year | Fiscal_Year | Tel_Inv_Detail |
| Organization Code | 20 - 25 | Organization_Code | FIMA_Org_Code | Tel_Inv_Detail |

| Input Field Name | File Positions | Temporary Column Name | Output Column Name | Output Table Name |
|---|---|---|---|---|
| Task Code | 26 - 31 | Task_Code | FIMA_Task_Code | Tel_Inv_Detail |
| Phase Code | 32 - 33 | Phase_Code | FIMA_Phase_Code | Tel_Inv_Detail |
| Object Code | 34 - 37 | Object_Code | FIMA_Object_Class | Tel_Inv_Detail |
| Amount (10,2) | 38 - 47 | Amount | Unit_Price | Tel_Inv_Detail |
| Secondary Reference Number | 48 - 56 | Secondary_Reference_ Number | Item_Descr | Tel_Inv_Detail |
| Transaction Code | 57 - 58 | Transaction_Code | Item_Descr | Tel_Inv_Detail |
| Reference Number | 59 - 74 | Reference_Number | Invoice_No | Tel_Inv_Control |
| Vendor Code | 75 - 90 | Vendor_Code | Input_Vendor_Code | Tel_Inv_Detail |

Table 4.14.1 - NWSAPP - FIMA File to Table Load Mapping

The data fields ‘Secondary Reference Number’ and ‘Transaction Code’ will be loaded into the Item_Description column on the Tel_Inv_Detail table of the non-validated and unmatched telecom temporary table. The ‘Transaction Code’ will be captured in the first two characters of the Item_Descr column within the table followed by the ‘Secondary Reference Number’.

#### *4.4.2.3.2 NWSAPP - CAMS File to Table Load Mapping*

| Input Field Name | File Positions | Temporary Column Name | Output Column Name | Output Table Name |
|---|---|---|---|---|
| Bill Date (mm/dd/yy) | 1 - 8 | Bill_Date | Invoice_Date | Tel_Inv_Control |
| Document Number | 9 - 17 | Document_No | Reference_No | Tel_Inv_Control |
| Fiscal Year (yy) | 18 - 21 | Fiscal_Year | Fiscal_Year | Tel_Inv_Detail |
| Bureau_Code | 22 - 23 | Bureau_Code | Bureau_Code | Tel_Inv_Control |
| CFS_Org_Code_1 | 24 - 25 | CFS_Org_Code_1 | Org1_Code | Tel_Inv_Detail |
| CFS_Org_Code_2 | 26 - 27 | CFS_Org_Code_2 | Org2_Code | Tel_Inv_Detail |
| CFS_Org_Code_3 | 28 - 31 | CFS_Org_Code_3 | Org3_Code | Tel_Inv_Detail |
| CFS_Org_Code_4 | 32 - 33 | CFS_Org_Code_4 | Org4_Code | Tel_Inv_Detail |
| CFS_Org_Code_5 | 34 - 35 | CFS_Org_Code_5 | Org5_Code | Tel_Inv_Detail |
| CFS_Org_Code_6 | 36 - 37 | CFS_Org_Code_6 | Org6_Code | Tel_Inv_Detail |
| CFS_Org_Code_7 | 38 - 39 | CFS_Org_Code_7 | Org7_Code | Tel_Inv_Detail |
| CFS_Project_Code | 40 - 46 | CFS_Project_Code | Project_Code | Tel_Inv_Detail |
| CFS_Task_Code | 47 - 49 | CFS_Task_Code | Task_Code | Tel_Inv_Detail |
| CFS_Object_Class_1 | 50 - 51 | CFS_Object_Class_1 | Object1_Code | Tel_Inv_Detail |
| CFS_Object_Class_2 | 52 - 53 | CFS_Object_Class_2 | Object2_Code | Tel_Inv_Detail |
| CFS_Object_Class_3 | 54 - 55 | CFS_Object_Class_3 | Object3_Code | Tel_Inv_Detail |
| CFS_Object_Class_4 | 56 - 57 | CFS_Object_Class_4 | Object4_Code | Tel_Inv_Detail |
| User_Define_ACCS | 58 - 63 | User_Define_ACCS | User_Define_ACCS | Tel_Inv_Detail |
| Amount (10,2) | 64 - 76 | Amount | Unit_Price | Tel_Inv_Detail |
| Secondary Reference Number | 77 - 85 | Secondary_Reference_Number | Item_Descr | Tel_Inv_Detail |

| Input Field Name | File Positions | Temporary Column Name | Output Column Name | Output Table Name |
|---|---|---|---|---|
| Transaction Code | 86 - 87 | Transaction_Code | Item_Descr | Tel_Inv_Detail |
| Reference Number | 88 - 103 | Reference_Number | Invoice_No | Tel_Inv_Control |
| Vendor Code | 104 - 119 | Vendor_Code | Input_Vendor_Code | Tel_Inv_Detail |
| Item_Description | 120 - 316 | Item_Descr | Item_Descr | Tel_Inv_Detail |
| User_Name | 317 - 346 | User_Name | User_Name | Tel_Inv_Header, Tel_Inv_Control, Tel_Inv_Detail |
| Modification_Date (mm-dd-rrrr hh:mi:ss PM) | 347 - 403 | Modification_Date | Modification_Date | Tel_Inv_Header, Tel_Inv_Control, Tel_Inv_Detail |
| Device_Name | 404 - 433 | Device_Name | Device_Name | Tel_Inv_Header, Tel_Inv_Control, Tel_Inv_Detail |

Table 4.14.2 - NWSAPP - CAMS File to Table Load Mapping

### *4.4.2.3.3 TELOPS - CAMS Table to Table Load Mapping*

| Input Column Name | Type and Size | Output Column Name | Output Table Name |
|---|---|---|---|
| Bill_Date | Date | Invoice_Date | Tel_Inv_Control |
| Reference_Number | Varchar2(20) | Reference_No | Tel_Inv_Control |
| Fiscal_Year | Number(4) | Fiscal_Year | Tel_Inv_Detail |
| Invoice_Number | Varchar2(20) | Invoice_No | Tel_Inv_Control |
| Bureau_Code | Number(2) | Bureau_Code | Tel_Inv_Control |
| CFS_Org_Code_1 | Varchar2(2) | Org1_Code | Tel_Inv_Detail |
| CFS_Org_Code_2 | Varchar2(2) | Org2_Code | Tel_Inv_Detail |
| CFS_Org_Code_3 | Varchar2(4) | Org3_Code | Tel_Inv_Detail |
| CFS_Org_Code_4 | Number(2) | Org4_Code | Tel_Inv_Detail |
| CFS_Org_Code_5 | Number(2) | Org5_Code | Tel_Inv_Detail |
| CFS_Org_Code_6 | Number(2) | Org6_Code | Tel_Inv_Detail |
| CFS_Org_Code_7 | Number(2) | Org7_Code | Tel_Inv_Detail |
| CFS_Project_Code | Varchar2(7) | Project_Code | Tel_Inv_Detail |
| CFS_Task_Code | Varchar2(3) | Task_Code | Tel_Inv_Detail |
| CFS_Object_Class_1 | Number(2) | Object1_Code | Tel_Inv_Detail |
| CFS_Object_Class_2 | Number(2) | Object2_Code | Tel_Inv_Detail |
| CFS_Object_Class_3 | Number(2) | Object3_Code | Tel_Inv_Detail |
| CFS_Object_Class_4 | Number(2) | Object4_Code | Tel_Inv_Detail |
| User_Define_ACCS | Number(6) | User_Define_ACCS | Tel_Inv_Detail |
| Disb_Amount | Varchar2(13,2) | Unit_Price | Tel_Inv_Detail |
| Item_Description | Varchar2(240) | Item_Descr | Tel_Inv_Detail |
| Vendor_Code | Varchar2(16) | Input_Vendor_Code | Tel_Inv_Control |
| User_Name | Varchar2(30) | User_Name | Tel_Inv_Header, Tel_Inv_Control, Tel_Inv_Detail |
| Modification_Date | Date:Time | Modification_Date | Tel_Inv_Header, Tel_Inv_Control, Tel_Inv_Detail |
| Device_Name | Varchar2(30) | Device_Name | Tel_Inv_Header, Tel_Inv_Control, Tel_Inv_Detail |

| Input Column Name | Type and Size | Output Column Name | Output Table Name |
|---|---|---|---|
| Processed_Flag | Varchar2(1) | N/A | N/A |

Table 4.14.3 - TELOPS - CAMS Table to Table Load Mapping

The TELOPS - CAMS input table will be created and maintained within the CAMS/CFS production environment. Unlike the input data batches that utilize ASCII flat files, the input data captured within this table will not be archived in a separate directory upon the completion of processing. The Processed_Flag field will not be populated during the load phase. At the conclusion of all Telecommunications Interface vendor invoice generation processing the Processed_Flag will be updated with 'Y' to ensure the load process does not attempt to process the same records multiple times.

#### *4.4.2.3.4 BAC - FIMA File to Table Load Mapping*

| Input Field Name | File Positions | Temporary Column Name | Output Column Name | Output Table Name |
|---|---|---|---|---|
| Date (mm/dd/yy) | 1 - 8 | Bill_Date | Invoice_Date | Tel_Inv_Control |
| Docnum | 9 - 17 | Document_No | Reference_No | Tel_Inv_Control |
| Org_Code | 18 - 23 | Organization_Code | FIMA_Org_Code | Tel_Inv_Detail |
| Acct_Fil1 | 24 | N/A | N/A | N/A |
| Task_No | 25 - 30 | Task_Code | FIMA_Task_Code | Tel_Inv_Detail |
| Phase_No | 31 - 32 | Phase_Code | FIMA_Phase_Code | Tel_Inv_Detail |
| Acct_Fil2 | 33 | N/A | N/A | N/A |
| Obj_Class | 34 - 37 | Object_Code | FIMA_Object_Class | Tel_Inv_Detail |
| Disbursed (12,4) [with '$'] | 38 - 52 | Amount | Unit_Price | Tel_Inv_Detail |
| Accrual | 53 - 67 | N/A | N/A | N/A |
| Sec_Ref_No | 68 - 76 | Secondary_Reference_ Number | Item_Descr | Tel_Inv_Detail |
| Acct_Fil3 | 77 | N/A | N/A | N/A |
| New_Acct | 78 - 80 | N/A | N/A | N/A |

Table 4.14.4 - BAC - FIMA File To Table Load Mapping

#### *4.4.2.3.5 BAC - CAMS File to Table Load Mapping*

| Input Field Name | File Positions | Temporary Column Name | Output Column Name | Output Table Name |
|---|---|---|---|---|
| Bill Date (mm/dd/yy) | 1 - 8 | Bill_Date | Invoice_Date | Tel_Inv_Control |
| Document Number | 9 - 17 | Document_No | Reference_No | Tel_Inv_Control |
| Fiscal Year (yyyy) | 18 - 21 | Fiscal_Year | Fiscal_Year | Tel_Inv_Detail |
| Bureau_Code | 22 - 23 | Bureau_Code | Bureau_Code | Tel_Inv_Control |
| CFS_Org_Code_1 | 24 - 25 | CFS_Org_Code_1 | Org1_Code | Tel_Inv_Detail |
| CFS_Org_Code_2 | 26 - 27 | CFS_Org_Code_2 | Org2_Code | Tel_Inv_Detail |
| CFS_Org_Code_3 | 28 - 31 | CFS_Org_Code_3 | Org3_Code | Tel_Inv_Detail |
| CFS_Org_Code_4 | 32 - 33 | CFS_Org_Code_4 | Org4_Code | Tel_Inv_Detail |

| Input Field Name | File Positions | Temporary Column Name | Output Column Name | Output Table Name |
|---|---|---|---|---|
| CFS_Org_Code_5 | 34 - 35 | CFS_Org_Code_5 | Org5_Code | Tel_Inv_Detail |
| CFS_Org_Code_6 | 36 - 37 | CFS_Org_Code_6 | Org6_Code | Tel_Inv_Detail |
| CFS_Org_Code_7 | 38 - 39 | CFS_Org_Code_7 | Org7_Code | Tel_Inv_Detail |
| CFS_Project_Code | 40 - 46 | CFS_Project_Code | Project_Code | Tel_Inv_Detail |
| CFS_Task_Code | 47 - 49 | CFS_Task_Code | Task_Code | Tel_Inv_Detail |
| CFS_Object_Class_1 | 50 - 51 | CFS_Object_Class_1 | Object1_Code | Tel_Inv_Detail |
| CFS_Object_Class_2 | 52 - 53 | CFS_Object_Class_2 | Object2_Code | Tel_Inv_Detail |
| CFS_Object_Class_3 | 54 - 55 | CFS_Object_Class_3 | Object3_Code | Tel_Inv_Detail |
| CFS_Object_Class_4 | 56 - 57 | CFS_Object_Class_4 | Object4_Code | Tel_Inv_Detail |
| User_Define_ACCS | 58 - 63 | User_Define_ACCS | User_Define_ACCS | Tel_Inv_Detail |
| Amount (12,4) [with '$'] | 64 - 76 | Amount | Unit_Price | Tel_Inv_Detail |
| Secondary Reference Number | 77 - 85 | Secondary_Reference_Number | Item_Descr | Tel_Inv_Detail |
| Item_Description | 86 - 316 | Item_Descr | Item_Descr | Tel_Inv_Detail |
| User_Name | 317 - 346 | User_Name | User_Name | Tel_Inv_Header, Tel_Inv_Control, Tel_Inv_Detail |
| Modification_Date (mm-dd-rrrr hh:mi:ss PM) | 347 - 403 | Modification_Date | Modification_Date | Tel_Inv_Header, Tel_Inv_Control, Tel_Inv_Detail |
| Device_Name | 404 - 433 | Device_Name | Device_Name | Tel_Inv_Header, Tel_Inv_Control, Tel_Inv_Detail |

Table 4.14.5 - BAC - CAMS File to Table Load Mapping

#### *4.4.2.3.6 DOT - FIMA File to Table Load Mapping*

The DOT - FIMA input file format will use a 'comma' delimited format.

| Order | Input Field Name | Format | Temporary Column Name | Output Column Name | Output Table Name |
|---|---|---|---|---|---|
| 1 | Bill_Date | Date (dd-mon-yyyy) | Bill_Date | Invoice_Date | Tel_Inv_Control |
| 2 | Document_Number | Varchar | Document_No | Referemce_No | Tel_Inv_Control |
| 3 | Fiscal_Year | Number (yyyy) | Fiscal_Year | Fiscal_Year | Tel_Inv_Detail |
| 4 | Secondary_Reference_Number | Varchar | Secondary_Reference_Number | Invoice_No | Tel_Inv_Control |
| 5 | FIMA_Org_Code | Varchar | FIMA_Org_Code | FIMA_Org_Code | Tel_Inv_Detail |

| Order | Input Field Name | Format | Temporary Column Name | Output Column Name | Output Table Name |
|---|---|---|---|---|---|
| 6 | FIMA_Task_Code | Varchar | FIMA_Task_Code | FIMA_Task_Code | Tel_Inv_Detail |
| 7 | FIMA_Phase_Code | Varchar | FIMA_Phase_Code | FIMA_Phase_Code | Tel_Inv_Detail |
| 8 | FIMA_Object_Code | Number | FIMA_Object_Code | FIMA_Object_Code | Tel_Inv_Detail |
| 9 | Disbursement_Amount | Number (12,4) | Disbursement_Amount | Unit_Price | Tel_Inv_Detail |
| 10 | Item Description | Varchar (Up to 240 Characters of Text Possible) | Item_Descr | Item_Descr | Tel_Inv_Detail |
| 11 | User_Name | Varchar (Up to 30 Characters of Text Possible) | User_Name | User_Name | Tel_Inv_Header, Tel_Inv_Control, Tel_Inv_Detail |
| 12 | Modification_Date | Date:Time (mm-dd-rrrr hh:mi:ss PM) | Modification_Date | Modification_Date | Tel_Inv_Header, Tel_Inv_Control, Tel_Inv_Detail |
| 13 | Device_Name | Varchar (Up to 30 Characters of Text Possible) | Device_Name | Device_Name | Tel_Inv_Header, Tel_Inv_Control, Tel_Inv_Detail |

Table 4.14.6 - DOT - FIMA File to Table Load Mapping

#### *4.4.2.3.7 DOT - CAMS File to Table Load Mapping*

The DOT - CAMS input file format will use a ‘comma’ delimited format.

| Order | Input Field Name | Format | Temporary Column Name | Output Column Name | Output Table Name |
|---|---|---|---|---|---|
| 1 | Bill_Date | Date (dd-mon-yyyy) | Bill_Date | Invoice_Date | Tel_Inv_Control |
| 2 | Document_Number | Varchar | Document_No | Referemce_No | Tel_Inv_Control |
| 3 | Fiscal_Year | Number (yyyy) | Fiscal_Year | Fiscal_Year | Tel_Inv_Detail |
| 4 | Secondary_Reference_Number | Varchar | Secondary_Reference_Number | Invoice_No | Tel_Inv_Control |
| 5 | Bureau_Code | Varchar | Bureau_Code | Bureau_Code | Tel_Inv_Control |
| 6 | CFS_Org_Code_1 | Varchar | Org1_Code | Org1_Code | Tel_Inv_Detail |

| Order | Input Field Name | Format | Temporary Column Name | Output Column Name | Output Table Name |
|---|---|---|---|---|---|
| 7 | CFS_Org_Code_2 | Varchar | Org2_Code | Org2_Code | Tel_Inv_Detail |
| 8 | CFS_Org_Code_3 | Varchar | Org3_Code | Org3_Code | Tel_Inv_Detail |
| 9 | CFS_Org_Code_4 | Number | Org4_Code | Org4_Code | Tel_Inv_Detail |
| 10 | CFS_Org_Code_5 | Number | Org5_Code | Org5_Code | Tel_Inv_Detail |
| 11 | CFS_Org_Code_6 | Number | Org6_Code | Org6_Code | Tel_Inv_Detail |
| 12 | CFS_Org_Code_7 | Number | Org7_Code | Org7_Code | Tel_Inv_Detail |
| 13 | CFS_Project_Code | Varchar | Project_Code | Project_Code | Tel_Inv_Detail |
| 14 | CFS_Task_Code | Varchar | Task_Code | Task_Code | Tel_Inv_Detail |
| 15 | CFS_Object_Class_1 | Number | Object1_Code | Object1_Code | Tel_Inv_Detail |
| 16 | CFS_Object_Class_2 | Number | Object2_Code | Object2_Code | Tel_Inv_Detail |
| 17 | CFS_Object_Class_3 | Number | Object3_Code | Object3_Code | Tel_Inv_Detail |
| 18 | CFS_Object_Class_4 | Number | Object4_Code | Object4_Code | Tel_Inv_Detail |
| 19 | User_Define_ACCS | Number | User_Define_ACCS | User_Define_ACCS | Tel_Inv_Detail |
| 20 | Disbursement_Amount | Number (12,4) | Disbursement_Amount | Unit_Price | Tel_Inv_Detail |
| 21 | Item Description | Varchar (Up to 240 Characters of Text Possible) | Item_Descr | Item_Descr | Tel_Inv_Detail |
| 22 | Vendor_Code | Varchar (Up to 16 Characters of Text Possible) | Input_Vendor_Code | Vendor_Name, Vendor_No and Vendor_ID | Tel_Inv_Control |
| 23 | User_Name | Varchar (Up to 30 Characters of Text Possible) | User_Name | User_Name | Tel_Inv_Header, Tel_Inv_Control, Tel_Inv_Detail |
| 24 | Modification_Date | Date:Time (mm-dd-rrrr hh:mi:ss PM) | Modification_Date | Modification_Date | Tel_Inv_Header, Tel_Inv_Control, Tel_Inv_Detail |
| 25 | Device_Name | Varchar (Up to 30 Characters of Text Possible) | Device_Name | Device_Name | Tel_Inv_Header, Tel_Inv_Control, Tel_Inv_Detail |

Table 4.14.7 - DOT - CAMS File to Table Load Mapping

### *4.4.2.3.8 NLSC - CAMS Table to Table Load Mapping*

| Input Column Name | Type and Size | Output Column Name | Output Table Name |
|---|---|---|---|
| Bill_Date | Date | Invoice_Date | Tel_Inv_Control |
| Reference_Number | Varchar2(20) | Reference_No | Tel_Inv_Control |
| Fiscal_Year | Number(4) | Fiscal_Year | Tel_Inv_Detail |

| Input Column Name | Type and Size | Output Column Name | Output Table Name |
|---|---|---|---|
| Invoice_Number | Varchar2(20) | Invoice_No | Tel_Inv_Control |
| Bureau_Code | Number(2) | Bureau_Code | Tel_Inv_Control |
| CFS_Org_Code_1 | Varchar2(2) | Org1_Code | Tel_Inv_Detail |
| CFS_Org_Code_2 | Varchar2(2) | Org2_Code | Tel_Inv_Detail |
| CFS_Org_Code_3 | Varchar2(4) | Org3_Code | Tel_Inv_Detail |
| CFS_Org_Code_4 | Number(2) | Org4_Code | Tel_Inv_Detail |
| CFS_Org_Code_5 | Number(2) | Org5_Code | Tel_Inv_Detail |
| CFS_Org_Code_6 | Number(2) | Org6_Code | Tel_Inv_Detail |
| CFS_Org_Code_7 | Number(2) | Org7_Code | Tel_Inv_Detail |
| CFS_Project_Code | Varchar2(7) | Project_Code | Tel_Inv_Detail |
| CFS_Task_Code | Varchar2(3) | Task_Code | Tel_Inv_Detail |
| CFS_Object_Class_1 | Number(2) | Object1_Code | Tel_Inv_Detail |
| CFS_Object_Class_2 | Number(2) | Object2_Code | Tel_Inv_Detail |
| CFS_Object_Class_3 | Number(2) | Object3_Code | Tel_Inv_Detail |
| CFS_Object_Class_4 | Number(2) | Object4_Code | Tel_Inv_Detail |
| User_Define_ACCS | Number(6) | User_Define_ACCS | Tel_Inv_Detail |
| Disb_Amount | Varchar2(13,2) | Unit_Price | Tel_Inv_Detail |
| Item_Description | Varchar2(240) | Item_Descr | Tel_Inv_Detail |
| Vendor_Code | Varchar2(16) | Input_Vendor_Code | Tel_Inv_Control |
| User_Name | Varchar2(30) | User_Name | Tel_Inv_Header, Tel_Inv_Control, Tel_Inv_Detail |
| Modification_Date | Date:Time | Modification_Date | Tel_Inv_Header, Tel_Inv_Control, Tel_Inv_Detail |
| Device_Name | Varchar2(30) | Device_Name | Tel_Inv_Header, Tel_Inv_Control, Tel_Inv_Detail |
| Processed_Flag | Varchar2(1) | N/A | N/A |

Table 4.14.8 - NLSC - CAMS Table to Table Load Mapping

The NLSC - CAMS input table will be created and maintained within the CAMS/CFS production environment. Unlike the input data batches that utilize ASCII flat files, the input data captured within this table will not be archived in a separate directory upon the completion of processing. The Processed_Flag field will not be populated during the load phase. At the conclusion of all Telecommunications Interface vendor invoice generation processing the Processed_Flag will be updated with 'Y' to ensure the load process does not attempt to process the same records multiple times.

The load process will work differently for input data batches that utilize the NLSC - CAMS format. When the end-user initiates the invoice generation processing on the TEL201 screen using the NLSC - CAMS format the Telecommunications Interface will access a specific table on CASC's production environment where NLSC data is maintained. It will copy this data to the Telecommunications Interface intermediary input tables where it will be maintained. It is important to note that if the modification date of an input data batch is the same as that of a data batch that has already

been successfully processed by the Telecommunications Interface, the interface will not download that file.

#### *4.4.2.3.9 Excel Spreadsheet - FIMA File to Table Load Mapping*

The NWSAPP - FIMA file format is currently in use as the standard flat file structure for the processing of telecommunication charges. Therefore the Excel spreadsheet's structure will closely mimic that of the NWSAPP - FIMA file format. The excel spreadsheet will use a 'comma' delimited format.

| Order | Input Field Name | Format | Temporary Column Name | Output Column Name | Output Table Name |
|---|---|---|---|---|---|
| 1 | Bill Date | Date (mm-dd-yy) | Bill_Date | Invoice_Date | Tel_Inv_Control |
| 2 | Document Number | XXXXXXXX XXXXXXXX XXXX | Document_No | Reference_No | Tel_Inv_Control |
| 3 | Invoice Number | XXXXXXXX XXXXXXXX XXXX | Invoice_No | Invoice_No | Tel_Inv_Control |
| 4 | Fiscal Year | 9999 (yyyy) | Fiscal_Year | Fiscal_Year | Tel_Inv_Detail |
| 5 | Organization Code | XXXXXX | Organization_Code | FIMA_Org_Code | Tel_Inv_Detail |
| 6 | Task Code | XXXXXX | Task_Code | FIMA_Task_Code | Tel_Inv_Detail |
| 7 | Phase Code | XX | Phase_Code | FIMA_Phase_Code | Tel_Inv_Detail |
| 8 | Object Code | 9999 | Object_Code | FIMA_Object_Class | Tel_Inv_Detail |
| 9 | Amount | 999999.99 (8,2) | Amount | Unit_Price | Tel_Inv_Detail |
| 10 | CFS Vendor No | 9999999999 | Vendor_No | Vendor_No | Tel_Inv_Control |
| 11 | CFS Vendor ID | 999999 | Vendor_ID | Vendor_ID | Tel_Inv_Control |
| 12 | Item Description | 240 Character of Text Possible | Item_Descr | Item_Descr | Tel_Inv_Detail |
| 13 | User Name | 30 Characters of Text Possible | User_Name | User_Name | Tel_Inv_Header, Tel_Inv_Control, Tel_Inv_Detail |
| 14 | Modification Date | Date:Time (mm-dd-rrrr hh:mi:ss PM) | Modification_Date | Modification_Date | Tel_Inv_Header, Tel_Inv_Control, Tel_Inv_Detail |
| 15 | Device Name | 30 Characters of Text Possible | Device_Name | Device_Name | Tel_Inv_Header, Tel_Inv_Control, Tel_Inv_Detail |

Table 4.14.9 - Excel Spreadsheet - FIMA File To Table Load Mapping

### *4.4.2.3.10 Excel Spreadsheet - CAMS File to Table Load Mapping*

| Order | Input Field Name | Format | Temporary Column Name | Output Column Name | Output Table Name |
|---|---|---|---|---|---|
| 1 | Bill Date | Date (mm-dd-yy) | Bill_Date | Invoice_Date | Tel_Inv_Control |
| 2 | Document Number | XXXXXXXX XXXXXXXX XXXX | Document_No | Reference_No | Tel_Inv_Control |
| 3 | Invoice Number | XXXXXXXX XXXXXXXX XXXX | Invoice_No | Invoice_No | Tel_Inv_Control |
| 4 | Fiscal Year | 9999 (yyyy) | Fiscal_Year | Fiscal_Year | Tel_Inv_Detail |
| 5 | Bureau_Code | 99 | Bureau_Code | Bureau_Code | Tel_Inv_Control |
| 6 | CFS_Org_Code_1 | XX | CFS_Org_Code_1 | Org1_Code | Tel_Inv_Detail |
| 7 | CFS_Org_Code_2 | XX | CFS_Org_Code_2 | Org2_Code | Tel_Inv_Detail |
| 8 | CFS_Org_Code_3 | XXXX | CFS_Org_Code_3 | Org3_Code | Tel_Inv_Detail |
| 9 | CFS_Org_Code_4 | 99 | CFS_Org_Code_4 | Org4_Code | Tel_Inv_Detail |
| 10 | CFS_Org_Code_5 | 99 | CFS_Org_Code_5 | Org5_Code | Tel_Inv_Detail |
| 11 | CFS_Org_Code_6 | 99 | CFS_Org_Code_6 | Org6_Code | Tel_Inv_Detail |
| 12 | CFS_Org_Code_7 | 99 | CFS_Org_Code_7 | Org7_Code | Tel_Inv_Detail |
| 13 | CFS_Project_Code | XXXXXXX | CFS_Project_Code | Project_Code | Tel_Inv_Detail |
| 14 | CFS_Task_Code | XXX | CFS_Task_Code | Task_Code | Tel_Inv_Detail |
| 15 | CFS_Object_Class_1 | 99 | CFS_Object_Class_1 | Object1_Code | Tel_Inv_Detail |
| 16 | CFS_Object_Class_2 | 99 | CFS_Object_Class_2 | Object2_Code | Tel_Inv_Detail |
| 17 | CFS_Object_Class_3 | 99 | CFS_Object_Class_3 | Object3_Code | Tel_Inv_Detail |
| 18 | CFS_Object_Class_4 | 99 | CFS_Object_Class_4 | Object4_Code | Tel_Inv_Detail |
| 19 | User_Define_ACCS | 999999 | User_Define_ACCS | User_Define_ACCS | Tel_Inv_Detail |
| 20 | Amount | 999999.99 (8,2) | Amount | Unit_Price | Tel_Inv_Detail |
| 21 | CFS_Vendor_No | 9999999999 | Vendor_No | Vendor_No | Tel_Inv_Control |
| 22 | CFS_Vendor_ID | 999999 | Vendor_ID | Vendor_ID | Tel_Inv_Control |
| 23 | Item_Description | 240 Character of Text Possible | Item_Descr | Item_Descr | Tel_Inv_Detail |

| Order | Input Field Name | Format | Temporary Column Name | Output Column Name | Output Table Name |
|---|---|---|---|---|---|
| 24 | User_Name | 30 Characters of Text Possible | User_Name | User_Name | Tel_Inv_Header, Tel_Inv_Control, Tel_Inv_Detail |
| 25 | Modification_Date | Date:Time (mm-dd-rrrr hh:mi:ss PM) | Modification_ Date | Modification_ Date | Tel_Inv_Header, Tel_Inv_Control, Tel_Inv_Detail |
| 26 | Device_Name | 30 Characters of Text Possible | Device_Name | Device_Name | Tel_Inv_Header, Tel_Inv_Control, Tel_Inv_Detail |

Table 4.14.10 - Excel Spreadsheet - CAMS File To Table Load Mapping

#### *4.4.2.4 Output*

This section lists the database tables that will be affected by the actions of the Tel_Input_Load routine. The table below lists the database tables where the Tel_Input_Load routine is creating, updating or deleting data.

| Table Name | Insert | Update | Delete | Comments |
|---|---|---|---|---|
| Tel_Inv_Header | Yes | Yes | Yes | Temporary Transaction Table (non-validated and unmatched telecom input temporary table) |
| Tel_Inv_Control | Yes | Yes | Yes | Temporary Transaction Table (non-validated and unmatched telecom input temporary table) |
| Tel_Inv_Detail | Yes | Yes | Yes | Temporary Transaction Table (non-validated and unmatched telecom input temporary table) |

Table 4.15 - Output Tables Affected by the Tel_Input_Load Routine

### *4.4.3 Validate Vendor Crosswalk*

The Tel_Vendor_Crosswalk routine is designed to crosswalk vendor information between the input data sources and the CAMS/CFS vendor maintenance tables. 'Crosswalking' is defined as mapping one set of values to another set of values so they can relate to each other. Currently, only one of the input data sources (NWSAPP) supplies the Telecommunications Interface with vendor information. The NWSAPP system attaches a Vendor_Code to each record within the input data batch. Each of the NWSAPP Vendor_Codes is associated with a CAMS/CFS vendor. As a result multiple vendor records are maintained on the TEL001 screen for this file format.

We have requested that the ground shipping charges processed by the NLCS include a Vendor_Code on their data input table. This will allow the Telecommunications Interface to differentiate between the multiple anticipated vendors for this file format. The other input data sources do not provide any vendor information. Therefore only one CAMS/CFS vendor is aligned with the file format for each input data batch.

When the end user selects an interface file type to process on the TEL201 screen the Telecommunications Interface will access the applicable maintenance record on Tel_Maint_Control and Tel_Maint_Vendor tables. If only one vendor has been established on the TEL001 screen for the selected maintenance record the interface will populate the vendor information fields (Selected_Vendor_Name, Selected_Vendor_Number and Selected_Vendor_ID) on the TEL201 screen with this vendor maintenance information.

If the global variables associated with the Selected_Vendor_Name, Selected_Vendor_Number and Selected_Vendor_ID fields from the TEL201 screen are populated with vendor data the routine will not attempt to crosswalk the vendor values. The routine will populate the appropriate vendor fields on each invoice record within the non-validated and unmatched telecom input temporary table with the vendor data captured in the global variables.

If more than one vendor has been established on the TEL001 screen for the selected maintenance record the interface will populate the TEL201 field Selected_Vendor_Name field with ‘Based on Input File’ and populate the Selected_Vendor_Number and Selected_Vendor_ID fields with ‘Null’ values. The Telecommunications Interface will then call the Tel_Vendor_Crosswalk routine and attempt to crosswalk the vendor information.

Crosswalked values will be applied to the applicable vendor fields for each invoice record recorded in the Tel_Inv_Control table.

At the conclusion of the Tel_Vendor_Crosswalk routine, the Telecommunications Interface will produce a Vendor Crosswalk Status Report and display a pop-up screen asking the initiator of the process if they wish to continue processing. Based upon the results captured in the report, the end user will either continue or stop processing.

#### *4.4.3.1 Input*

The following sections list all tables needed prior to the execution of the Tel_Vendor_Crosswalk routine. The table below lists the database tables that will be accessed by the routine.

| Table Name | Screen | Usage | Record Requirement |
|---|---|---|---|
| Tel_Inv_Header | N/A | Temporary Transaction Table | Record values captured in the header table of the non-validated and unmatched telecom input temporary table |
| Tel_Inv_Control | N/A | Temporary Transaction Table | Record values captured in the control table of the non-validated and unmatched telecom input temporary table |
| Tel_Inv_Detail | N/A | Temporary Transaction Table | Record values captured in the detail table of the non-validated and unmatched telecom input temporary table |
| Tel_Maint_Control | TEL001 | Reference | Interface File Types from active and valid header records |
| Tel_Maint_Vendor | TEL001 | Reference | Associated vendor information of selected interface file type and OPAC status |
| Parameter | N/A | Store Screen Values | N/A |

Table 4.16 - Tel_Vendor_Crosswalk Routine Input Tables

#### *4.4.3.2 Processing Logic of Validated and Unmatched Telecom Input Temporary Table*

The following tables describe the field descriptions of the validated and unmatched telecom input temporary table. The validate and unmatched telecom input temporary table is identical in its structure to the non-validated and unmatched telecom input temporary table. Crosswalked vendor information will be applied to the individual vendor invoice records on the validated and unmatched telecom input temporary table where applicable.

Only the fields that will be affected by the Tel_Vendor_Crosswalk routine will be documented below.

##### *4.4.3.2.1 Tel_Inv_Control Table Overview*

The document table below describes the control table of the validated and unmatched telecom input temporary table Tel_Inv_Control. Only the fields that will be affected by the Tel_Vendor_Crosswalk routine are documented below.

| Field Name | Type and Size | Description |
|---|---|---|
| Vendor_No | Number(10) | CAMS/CFS vendor identification code. |

| Field Name | Type and Size | Description |
|---|---|---|
| Vendor_ID | Number(6) | CAMS/CFS sequentially generated code used to differentiate vendor address information. |

Table 4.17 - Overview Processing Logic for the Validated and Unmatched Telecom Input Temporary Table Control Table (Tel_Inv_Control)

#### *4.4.3.2.2 Tel_Inv_Control Table Detailed Review*

The document table below describes the processing logic for the columns of the control table (Tel_Inv_Control) of the validated and unmatched telecom input temporary table that are affected by the Tel_Vendor_Crosswalk routine.

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the CAMS/CFS vendor number that is; Captured as a global variable on the TEL201 screen or associated with the Input_Vendor_Code as established on the TEL001 maintenance tables. |
| Field Name | Vendor_No |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | Yes. If the Tel_Vendor_Crosswalk routine is unsuccessful and the end-user opts to continue processing, the vendor_no field will be populated with a default value. The default value will be the number '9' across the entire length of the field for each invoice record. The Standard Interface error routines will detect the missing data and send the record to an error correction screen. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | See Required |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the CAMS/CFS vendor ID that is; Captured as a global variable on the TEL201 screen or associated with the Input_Vendor_Code as established on the TEL001 maintenance tables. |
| Field Name | Vendor_ID |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |

| Column Property | Property Value |
|---|---|
| Required | Yes. If the Tel_Vendor_Crosswalk routine is unsuccessful and the end-user opts to continue processing, the vendor_id field will be populated with a default value. The default value will be the number '9' across the entire length of the field for each invoice record. The Standard Interface error routines will detect the missing data and send the record to an error correction screen. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | See Required |

Table 4.18 - Detailed Review Processing Logic for the Validated and Unmatched Telecom Input Temporary Table Control Table (Tel_Inv_Control)

#### *4.4.3.2.3 Tel_Inv_Detail Table Overview*

The document table below describes the detail table of the validated and unmatched telecom input temporary table Tel_Inv_Detail. Only the fields that will be affected by the Tel_Vendor_Crosswalk routine are documented below.

| Field Name | Type and Size | Description |
|---|---|---|
| Payment_Type | Varchar2(6) | Payment Type associated with a particular vendor number and vendor ID. |
| Payment_Office_Code | Varchar2(6) | Payment Office Code associated with a particular vendor number and vendor ID. |
| Center_Code | Varchar2(6) | Center Code associated with a particular vendor number and vendor ID. |
| Payment_Enclosure | Varchar2(1) | Payment Enclosure Flag associated with a particular vendor number and vendor ID. |

Table 4.19 - Overview Processing Logic for the Validated and Unmatched Telecom Input Temporary Table Detail Table (Tel_Inv_Detail)

#### *4.4.3.2.4 Tel_Inv_Detail Table Detailed Review*

The document table below describes the processing logic for the columns of the detail table (Tel_Inv_Detail) of the validated and unmatched telecom input temporary table that are affected by the Tel_Vendor_Crosswalk routine.

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the CAMS/CFS Payment_Type that is associated with the crosswalked Vendor Number and Vendor ID. |
| Field Name | Payment_Type |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes. if the Tel_Vendor_Crosswalk is successful base upon the CFS_Vendor_Payment_Method for the CFS_Vendor_No and CFS_Vendor_ID as recorded on the Tel_Maint_Vendor table.<br><br>If the Tel_Vendor_Crosswalk is unsuccessful populate with 'EFT'. If the end-user opts to continue processing, the vendor_no and vendor_id field will be populated with default values. The Standard Interface error routines will detect the invalid data and send the record to an error correction screen.<br><br>By defaulting the Payment_Type we insure that we can populate all required payment information fields with valid data. When the end-user corrects the vendor data in the Standard Interface the payment information fields will be overwritten with the correct data. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | See Required |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the payment office code from which the input data batch is transferred to the Standard Interface. |
| Field Name | Payment_Office_Code |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes. The Payment_Office_Code will be derived from the Payment_Office_Code of the end-user identified by their database user name (DB_User_Name) from the Employee_Control table. |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the treasury finance center code that corresponds to the payment office code and payment type. |

| Column Property | Property Value |
|---|---|
| Field Name | Center_Code |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Set Center_Code equal to the Center_Code on the CAMS/CFS Payment_Office_Detail table where the Office_Code on the CAMS/CFS Payment_Office_Control table is equal to the Payment_Office_Code on the Tel_Inv_Detail table and the Payment_Type_Code on the Payment_Office_Detail table is equal to the Payment_Type on Tel_Inv_Detail and the Active_Status on the CAMS/CFS Payment_Office_Control table is 'Y' for the line item. |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | See System Generated |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the payment enclosure flag for the line item. This will be populated with a '2' (two) by the Tel_Vendor_Crosswalk routine. |
| Field Name | Payment_Enclosure |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

Table 4.20 - Detailed Review Processing Logic for the Validated and Unmatched Telecom Input Temporary Table Detail Table (Tel_Inv_Detail)

#### *4.4.3.3 Output*

This section lists the database tables that will be affected by the actions of the Tel_Vendor_Crosswalk routine. The table below lists the database tables where the Tel_Vendor_Crosswalk routine is creating, updating or deleting data.

| Table Name | Insert | Update | Delete | Comments |
|---|---|---|---|---|
| Tel_Inv_Header | No | Yes | Yes | Temporary Transaction Table (for the validated and unmatched telecom input temporary table) |
| Tel_Inv_Control | No | Yes | Yes | Temporary Transaction Table (for the validated and unmatched telecom input temporary table) |
| Tel_Inv_Detail | No | Yes | Yes | Temporary Transaction Table (for the validated and unmatched telecom input temporary table) |

Table 4.21 - Output Tables Affected by the Tel_Vendor_Crosswalk Routine

At the conclusion of processing the Tel_Vendor_Crosswalk routine will have updated the Vendor_No and Vendor_ID columns of the Tel_Inv_Control table with vendor information where the crosswalk routine was successful and with default values that are invalid where the crosswalk routine was not successful.

The File Load and Vendor Crosswalking routines comprise the first phase, of two, for the Telecommunications Interface Invoice Generation Processing. At the conclusion of the Phase 1 if the file load is unsuccessful the TEL201 File Process Brief Report will appear on the end-users screen. The on-line report will indicate that the file load was unsuccessful, the total of records from the input file read and the number and percentage of records that failed processing. If one record fails processing this brief report will appear and all processing will be halted. It is important to note that only input data batches that utilize flat files and fail the load process will encounter this routine.

If the load process was successful this brief report will not appear and the Phase 1 processing will continue to the vendor crosswalk routines. At the conclusion of the vendor crosswalk routines the end-user will receive an on-line brief report and a hard report will be sent to their e-mail address or printer depending upon the criteria specified on the TEL201 screen. The report will be reviewed by the end-user to determine if the vendor information has been successfully crosswalked for the invoice records within the input data file.

The TEL201a Vendor Crosswalk Brief Report will indicate the total number of records read from the input file, the number of invoice control and detail records generated as well as the success and failure numbers and percentages of the vendor crosswalk routines. The vendor crosswalk routines will apply to the invoice control records only, as the vendor information is captured at the control level in CAMS/CFS. The TEL201a Vendor Crosswalk Brief Report will also confirm the end-user’s intent to continue processing based upon the results captured in the Vendor Crosswalk Status Report.

If end-user may choose to continue processing regardless of the success or failure of the routine. If the vendor crosswalk routine was unsuccessful and the user chooses to continue processing the Tel_Invoice_Control table will be updated with default vendor information that is invalid for the invoice records where the crosswalk routine was unsuccessful. The Standard Interface will detect the default and invalid vendor information and send the invoice record to an error correction screen where the applicable vendor information will be inserted or the invoice record deleted.

If the user chooses to stop processing, the Validated and Unmatched Telecom Temporary table will be deleted. The input record will remain in the input directory or table location as defined on INT001. The end-user will forward the Vendor Crosswalk Status Report to the appropriate individual to request updates to be made the TEL001 maintenance tables for the vendor crosswalk information. After the updates have been completed the end-user will re-initiate processing using the same input data batch.

For input data batches that utilize the NLSC input table format the process will work differently. If the user chooses to stop processing, the Validated and Unmatched Telecom Temporary table will be deleted and in addition all of the records, for the batch number being processed, will be deleted from the input table. It is assumed that any changes to the NLSC input data should be made at the data source. Therefore by deleting the input data from the Telecommunications Interface temporary tables we are requiring all data changes to be made at the source.

It is important to note that in order for all records within a corrected data batch to be processed as one batch the modification date must be the same for all records because the Telecommunications Interface utilizes the modification date of the records to identify a data batch.

### *4.4.4 Generate Vendor Crosswalk Status Report*

After the Tel_Vendor_Crosswalk routine is complete the Telecommunications Interface will call the Tel_Vendor_Crosswalk_Status_Report routine. This routine will generate the Vendor Crosswalk Status Report (TEL201a) and write the report to the directory as specified on the INT001 screen. The Vendor Crosswalk Status Report will capture a summary of the vendor crosswalk processing success and failure, applicable processing percentages and details of the failed records. The purpose of the report is to provide end-users and Telecommunications Interface maintenance personnel information that allows them to make educated decisions about invoice record generation process.

Depending upon the reporting selection entered on the TEL201 screen this report will be sent directly to a printer or e-mailed to the end-users e-mail account. Reports that are e-mailed will be designed to be imported into Microsoft Excel similar to the logic developed for QR101 reports.

#### *4.4.4.1 Input*

The following sections list all tables needed prior to the execution of the Tel_Vendor_Crosswalk_Status_Report routine. The table below lists the database tables that will be accessed by the routine.

| Table Name | Screen | Usage | Record Requirement |
|---|---|---|---|
| Tel_Inv_Header | N/A | Reference | Record values captured in the header table of the validated and unmatched telecom input temporary table |
| Tel_Inv_Control | N/A | Reference | Record values captured in the control table of the validated and unmatched telecom input temporary table |
| Tel_Inv_Detail | N/A | Reference | Record values captured in the detail table of the validated and unmatched telecom input temporary table |
| Tel_Maint_Control | TEL001 | Reference | Interface File Types from active and valid header records |
| Tel_Maint_Vendor | TEL001 | Reference | Associated vendor information of selected interface file type |
| Parameter | N/A | Store Screen Values | N/A |

Table 4.22 - Tel_Vendor_Crosswalk_Status_Report Routine Input Tables

#### *4.4.4.2 Report Format*

The following is a screen shot of the TEL201a - Telecommunications Interface Vendor Crosswalk Status Report. The report will capture the processing results of the most recent Tel_Vendor_Crosswalk routine.

**Subject: Vendor crosswalk report results**
**Date:** Tue, 17 Sep 2002 14:46:25 -0400 (EDT)
**From:** CAMS-MAIL-CENTER@rdc.noaa.gov

CREATION RUN DATE: 09/17/2002 COMMERCE ADMINISTRATIVE MANAGEMENT SYSTEM USER ID: OPS$NFROBLEG
REPORT ID: TEL201R NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION PAGE : 1
INSTANCE: GP2 TEL201A - CAMS/CFS TELECOMMUNICATIONS
INTERFACE VENDOR CROSSWALK PROCESSING STATUS REPORT

Criteria:

Interface File Type Processed: NWS

Name/Batch Number of File Processed: NWS_FIMA_OCT-FEB.txt

Item Type Processed: MARINE

| Summary of Processing: | Read | Crosswalked Successfully | Failed Crosswalk |
|---|---|---|---|
| Number of Vendor Records: | 9 | 6 | 3 |
| Percentages: | | 67% | 33% |

| Details of Failures: | Vendor Code | Reference Number | Amount |
|---|---|---|---|
| | ATT | 9N6440100 | $12.92 |
| | ATT | 9N6440100 | $5.00 |
| | ATT | 9N6440100 | $17.85 |

***** END OF THE REPORT *****

Figure 6.0 - Layout of the TEL201a - Vendor Crosswalk Status Report

### *4.4.4.3 TEL201a - Vendor Crosswalk Status Report Processing Logic*

#### *4.4.4.3.1 TEL201a - Vendor Crosswalk Status Report Overview*

The document table below provides an overview of the processing logic associated with the columns on the TEL201a - Vendor Crosswalk Status Report.

| Report Label | Field Name | Type and Size |
|---|---|---|
| Creation Run Date | Date | Date |
| Report ID | Report_ID | Varchar2(10) |
| Instance | Instance | Varchar2(10) |
| User ID | User_ID | Varchar2(30) |
| Page | Page | Varchar2(3) |
| Interface File Type Processed: | Processed_Interface_File_Type | Varchar2(4) |
| Name/Batch Number of File Processed: | Processed_File_Name_Batch | Varchar2(30) |
| Interface Item Type Processed: | Processed_Interface_Item_Type | Varchar2(6) |
| (Number of Vendor Records) Read | No_Records_Read | Number(5) |
| (Number of Vendor Records) Crosswalked Successfully | No_Records_Success | Number(5) |
| (Number of Vendor Records) Failed Crosswalk | No_Records_Fail | Number(5) |
| (Percentages) Crosswalked Successfully | Percnt_Success | Number(3,1) |
| (Percentages) Failed Crosswalk | Percnt_Fail | Number(3,1) |
| Vendor Code | Input_Vendor_Code | Varchar2(16) |

| Report Label | Field Name | Type and Size |
|---|---|---|
| Reference Number | Reference_No | Varchar2(20) |
| Amount | Amount | Number (13,2) |

Table 4.23 - Overview Processing Logic for the TEL201a - Vendor Crosswalk Status Report

#### *4.4.4.3.2 TEL201a - Vendor Crosswalk Status Report Detailed Review*

The document table below describes in detail the processing logic associated with the columns shown in the TEL201a - Vendor Crosswalk Status Report.

| Field Property | Property Value |
|---|---|
| Report Label | Creation Run Date: |
| Purpose | This field captures the execution date of the report. This field is part of the header record of the report. |
| Field Name | Date |
| Table Name | N/A |
| Format | DD-MON-RRRR, Left Align |
| Calculation Logic | System generated based upon the system date. |

| Field Property | Property Value |
|---|---|
| Report Label | Report ID: |
| Purpose | This field captures the report ID within CAMS/CFS. This field is part of the header record of the report. |
| Field Name | Report_ID |
| Table Name | N/A |
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Instance: |
| Purpose | This field captures the instance in which the report was generated. This field is part of the header record of the report. |
| Field Name | Instance |
| Table Name | N/A |
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | User ID: |
| Purpose | This field captures the Oracle Database User ID of the end-user that initiated the original execution of the processing that generated the report. This field is part of the header record of the report. |
| Field Name | User_ID |
| Table Name | N/A |
| Format | Right Align |

| Field Property | Property Value |
|---|---|
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Page: |
| Purpose | This field captures the page number of the report. This field is part of the header record of the report. |
| Field Name | Page |
| Table Name | N/A |
| Format | 999, Right Align |
| Calculation Logic | System generated based on the number of pages for the report. |

| Field Property | Property Value |
|---|---|
| Report Label | Interface File Type Processed: |
| Purpose | This field captures the Select_Interface_File_Type as selected on the TEL201 screen. |
| Field Name | Processed_Interface_File_Type |
| Table Name | N/A |
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Name/Batch Number of File Processed: |
| Purpose | This field captures the Select_File_To_Process as selected on the TEL201 screen if the Record_Format_ASCII field on the Tel_Maint_Control table associated with the TEL001 screen for the selected interface file type is set to 'Y'.<br><br>This field captures the Select_Input_Date as selected on the TEL201 screen if the Record_Format_Table field on the Tel_Maint_Control table associated with the TEL001 screen for the selected interface file type is set to 'Y'. |
| Field Name | Processed_File_Name_Batch |
| Table Name | N/A |
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Interface Item Type Processed: |
| Purpose | This field captures the Select_Interface_Item_Type as selected on the TEL201 screen. |
| Field Name | Processed_Interface_Item_Type |
| Table Name | N/A |
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | (Number of Vendor Records) Read |
| Purpose | This field captures the total number of input records read by the Telecommunications Interface during the Tel_Vendor_Crosswalk routine. |
| Field Name | No_Records_Read |
| Table Name | N/A |
| Format | 99999, Right Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | (Number of Vendor Records) Crosswalked Successfully |
| Purpose | This field captures the total number of *invoice control records* successfully crosswalked by the Telecommunications Interface during the Tel_Vendor_Crosswalk routine. |
| Field Name | No_Records_Success |
| Table Name | N/A |
| Format | 99999, Right Align |
| Calculation Logic | A record will be considered 'successfully crosswalked' if active and valid CAMS/CFS vendor information, as recorded on the TEL001 screen, is completely applied to an invoice control record. |

| Field Property | Property Value |
|---|---|
| Report Label | (Number of Vendor Records) Failed Crosswalk |
| Purpose | This field captures the total number of *invoice control records* that were not successfully crosswalked by the Telecommunications Interface during the Tel_Vendor_Crosswalk routine. |
| Field Name | No_Records_Fail |
| Table Name | N/A |
| Format | 99999, Right Align |
| Calculation Logic | A record will be considered 'unsuccessfully crosswalked' if active and valid CAMS/CFS vendor information, as recorded on the TEL001 screen, cannot be applied to an invoice control record.<br><br>A record could fail for any of the following reasons:<br>1 - The input file vendor code has not been established on the TEL001 maintenance screen.<br>2 - There are no crosswalk values established for the input file vendor code supplied on the input record.<br>3 - The CAMS/CFS vendor values associated with the input file vendor code are not active.<br>4 - The CAMS/CFS vendor values entered on maintenance screen are not active. |

| Field Property | Property Value |
|---|---|
| Report Label | (Percentages) Crosswalked Successfully |
| Purpose | This field captures the percentage of the total number of input records successfully crosswalked by the Telecommunications Interface during the Tel_Vendor_Crosswalk routine. |
| Field Name | Percnt_Success |
| Table Name | N/A |

| Field Property | Property Value |
|---|---|
| Format | 999.9%, Center Align |
| Calculation Logic | (No_Records_Success/No_Records_Read) * 100 |

| Field Property | Property Value |
|---|---|
| Report Label | (Percentages) Failed Crosswalk |
| Purpose | This field captures the percentage of the total number of input records that were not successfully crosswalked by the Telecommunications Interface during the Tel_Vendor_Crosswalk routine. |
| Field Name | Percnt_Fail |
| Table Name | N/A |
| Format | 999.9%, Center Align |
| Calculation Logic | (No_Records_Fail/No_Records_Read) * 100 |

| Field Property | Property Value |
|---|---|
| Report Label | Vendor Code |
| Purpose | This field captures the vendor code (vendor name) as supplied by the input record if available. Only select systems will supply the vendor code. If no vendor code is supplied by the input record this field will be blank. |
| Field Name | Input_Vendor_Code |
| Table Name | N/A |
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Reference Number |
| Purpose | This field captures the reference number as supplied by the input record. |
| Field Name | Reference_Number |
| Table Name | N/A |
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Amount |
| Purpose | This field captures the dollar amount of the control record as supplied by the input record. |
| Field Name | Amount |
| Table Name | N/A |
| Format | Right Align |
| Calculation Logic | N/A |

Table 4.24 - Detailed Review Processing Logic for the TEL201a - Vendor Crosswalk Status Report

#### *4.4.4.4 Output*

No database tables will be affected by the actions of the

Tel_Vendor_Crosswalk_Status_Report routine.

### *4.4.5 Generate AP Transaction Number Temporary Table*

The Tel_AP_Trans_No_Load routine is designed to identify and provide to the Standard Interface an interfaced invoice record criterion that will allow it to be properly applied to an existing shell invoice that was generated through an interfaced estimated accrual record. The Accounts Payable (AP) Transaction Number (Trans_No) from AP_Control and AP_Detail tables will be used as the unique criterion.

The Tel_AP_Trans_No_Load routine will initially execute a query on the CAMS/CFS AP_Control and AP_Detail tables using the following criteria:

Invoice_Type = Derived from the Invoice_Type field on the TEL001 screen
Item_Type = Equal to the global variable captured on the TEL201 screen as Select_Interface_Item_Type
Invoice_Status = 'OPEN'
Document_Source = 'NONE'
GL_Impact_Source = 'PM050'
Approved_Flag = 'N'

The Invoice_Type will be derived from the Invoice_Type field on the TEL001 screen from the maintenance record where the Interface_File_Type. Item_Type and File_Format is equal to the global variable captured on the TEL201 screen as Select_Interface_File_Type, Select_Interface_Item_Type and Select_Interface_File_Format respectively.

It will retrieve the Trans_No and the Reference_No (FIMA Document Number from the input file + Month and Year of the GL_End_Date of the EA) from the CAMS/CFS AP_Control table for all returned records and place the data into the temporary table Tel_AP_Trans_No.

#### *4.4.5.1 Input*

The following sections list all tables needed prior to the execution of the Tel_AP_Trans_No_Load routine. The table below lists the database tables that will be accessed by the routine.

| Table Name | Screen | Usage | Record Requirement |
|---|---|---|---|
| Tel_AP_Trans_No | N/A | Temporary AP Trans_No Table | Record the AP Transaction Number and Source Reference Number of CAMS/CFS shell invoices |
| AP_Control | PM003 | Reference | Shell invoice records |
| AP_Detail | PM003 | Reference | Shell invoice records |
| Tel_Inv_Header | N/A | Temporary Transaction Table | Capture invoice record values on the validated and unmatched telecom input temporary table |

| Table Name | Screen | Usage | Record Requirement |
|---|---|---|---|
| Tel_Inv_Control | N/A | Temporary Transaction Table | Capture invoice record values on the validated and unmatched telecom input temporary table |
| Tel_Inv_Detail | N/A | Temporary Transaction Table | Capture invoice record values on the validated and unmatched telecom input temporary table |
| Tel_Maint_Control | TEL001 | Reference | Item Types associated with valid and active Interface File Types |
| Parameter | N/A | Store Screen Values | N/A |

Table 4.25 - Tel_AP_Trans_No_Load Routine Input Tables

### *4.4.5.2 Processing Logic of the Telecom AP Transaction Number Temporary Table*

#### *4.4.5.2.1 Tel_AP_Trans_No Table Overview*

The document table below describes the temporary table associated with the Tel_AP_Trans_No_Load routine.

| Field Name | Type and Size | Description |
|---|---|---|
| AP_Trans_No | Number(8) | CAMS/CFS AP Transaction Number of the shell invoice. |
| Reference_No | Varchar2(20) | CAMS/CFS Source Reference Number of the shell invoice.<br><br>Will be equal to the FIMA Document Number as supplied on the input record. |

Table 4.26 - Overview Processing Logic for the temporary table associated with the Tel_AP_Trans_No_Load routine (Tel_AP_Trans_No)

#### *4.4.5.2.2 Tel_AP_Trans_No Table Detailed Review*

The document table below describes the processing logic for the temporary table associated with the Tel_AP_Trans_No_Load routine.

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the CAMS/CFS AP Transaction Number of a shell invoice captured on PM003 (AP_Control and AP_Detail). |
| Field Name | AP_Trans_No |
| Table Name | Tel_AP_Trans_No |
| Displayed | N/A |
| Format | N/A |
| Required | No. This field will only be populated if the Tel_AP_Trans_No_Load routine encounters shell invoices based upon the criteria of the query. |

| Column Property | Property Value |
|---|---|
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the CAMS/CFS Source Reference Number of a shell invoice captured on PM003 (AP_Control and AP_Detail).<br><br>This field will also capture the month (mm) and year (rrrr) for which the estimated accrual record was generated. By capturing this additional information in the Reference_No field on the AP_Control table, we ensure that the multiple estimated accrual records for the same invoice record are unique per the Standard Interface requirements. |
| Field Name | Reference_No |
| Table Name | Tel_AP_Trans_No |
| Displayed | N/A |
| Format | 999999999-MMRRRR |
| Required | No. This field will only be populated if the Tel_AP_Trans_No_Load routine encounters shell invoices based upon the criteria of the query. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | ▸ See Required<br>▸ All returned rows will be sorted by Reference_No |

Table 4.27 - Detailed Review of the Processing Logic for the temporary table associated with the Tel_AP_Trans_No_Load routine (Tel_AP_Trans_No)

#### *4.4.5.3 Output*

This section lists the database tables that will be affected by the actions of the Tel_AP_Trans_No_Load routine. The table below lists the database tables where the Tel_AP_Trans_No_Load routine is creating, updating or deleting data.

| Table Name | Insert | Update | Delete | Comments |
|---|---|---|---|---|
| Tel_AP_Trans_No | Yes | Yes | No | Temporary AP Trans No Matching Table |

Table 4.28 - Output Tables Affected by the Tel_AP_Trans_No_Load Routine

### *4.4.6 Match Input File Records and AP Transaction Numbers*

At the conclusion of the Tel_AP_Trans_No_Load routine the Tel_AP_Match routine will attempt to associate the shell invoice's AP Transaction Numbers captured in the Tel_AP_Trans_No temporary table with the invoice records captured in the Tel_Inv_Control table. It will read the Reference_No column on the Tel_Inv_Control table for each invoice record and search the Tel_AP_Trans_No temporary table for an identical Reference_No, excluding the month and year of the estimated accrual. If a match is detected the Tel_AP_Match routine will apply the AP Transaction Number from the Tel_AP_Trans_No temporary table to the AP_Trans_No column on the Tel_Inv_Control table for the processed invoice record.

If no records within the Tel_AP_Trans_No temporary table contain an identical Reference_No the AP Transaction Number will not be applied to the invoice record and therefore will not be matched to a shell invoice.

If there are multiple shell invoices with the same Reference_No, the Tel_AP_Match routine will select the first AP Transaction Number in the Tel_AP_Trans_No temporary table.

This process will be executed for every invoice record in the Tel_Inv_Control table. At the conclusion of the Tel_AP_Match routine the Tel_AP_Trans_No temporary table will be dropped.

#### *4.4.6.1 Input*

The following sections list all tables needed prior to the execution of the Tel_AP_Match routine. The table below lists the database tables that will be accessed by the routine.

| Table Name | Screen | Usage | Record Requirement |
|---|---|---|---|
| Tel_AP_Trans_No | N/A | Temporary AP Trans_No Table | Record the AP Transaction Number and Source Reference Number of CAMS/CFS shell invoices |
| Tel_Inv_Header | N/A | Temporary Transaction Table | Capture invoice record values on the validated and unmatched telecom input temporary table |
| Tel_Inv_Control | N/A | Temporary Transaction Table | Capture invoice record values on the validated and unmatched telecom input temporary table |

| Table Name | Screen | Usage | Record Requirement |
|---|---|---|---|
| Tel_Inv_Detail | N/A | Temporary Transaction Table | Capture invoice record values on the validated and unmatched telecom input temporary table |
| Parameter | N/A | Store Screen Values | N/A |

Table 4.29 - Tel_AP_Match Routine Input Tables

#### *4.4.6.2 Processing Logic of the Validated and Matched Telecom Input Temporary Table*

The following document tables describe the column descriptions of the validated and matched telecom input temporary table. The validated and matched telecom input temporary table is identical in its structure to the validated and unmatched telecom input temporary table. The only difference is, where applicable, an AP Transaction Number has been applied to each of the invoice records within the input data batch.

Only the fields that may be affected by the Tel_AP_Match routine will be documented below.

##### *4.4.6.2.1 Tel_Inv_Control Table Overview*

The document table below describes the control table of the validated and matched telecom input temporary table Tel_Inv_Control. Only the fields that may be affected by the Tel_AP_Match routine are documented below.

| Field Name | Type and Size | Description |
|---|---|---|
| AP_Trans_No | Number(8) | CAMS/CFS vendor identification code. |

Table 4.30 - Overview Processing Logic for the Validated and Matched Telecom Input Temporary Table Control Table (Tel_Inv_Control)

##### *4.4.6.2.2 Tel_Inv_Control Table Detailed Review*

The document table below describes the processing logic for the columns of the control table (Tel_Inv_Control) of the validated and matched telecom input temporary table that are affected by the Tel_AP_Match routine.

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture, if applicable, the CAMS/CFS AP Transaction Number from the AP_Control table associated with the PM003 screen. This field, if populated, will be used as the primary matching criteria between a shell and actual invoice. |
| Field Name | AP_Trans_No |

| Column Property | Property Value |
|---|---|
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

Table 4.31 - Detailed Review of the Processing Logic for the Validated and Matched Telecom Input Temporary Table Control Table (Tel_Inv_Control)

#### *4.4.6.3 Output*

This section lists the database tables that will be affected by the actions of the Tel_AP_Match routine. The table below lists the database tables where the Tel_AP_Match routine is creating, updating or deleting data.

| Table Name | Insert | Update | Delete | Comments |
|---|---|---|---|---|
| Tel_AP_Trans_No | No | No | Yes | Temporary AP Trans No Matching Table |
| Tel_Inv_Control | No | Yes | No | Temporary Transaction Table (for the validated and matched telecom input temporary table) |

Table 4.32 - Output Tables Affected by the Tel_AP_Match Routine

### *4.4.7 TEL201A - 'G' Schedule Selection Pop-Up Screen*

#### *4.4.7.1 Form Layout*

The TEL201A screen will be developed as a Character screen using Oracle Forms Version 3.0. The TEL201A screen will provide a mechanism to enter unique search criteria that will allow the end-user to identify the appropriate 'G' Schedule Number to be applied to each invoice record for On-Line Payment and Collection (OPAC) charges within the table. The returned schedule number listing will be derived from the unapproved control records on PM041 (manual_control).

The TEL201A screen will only be used as part of the invoice generation processing if the OPAC_Flag on the Tel_Maint_Control table associated with the TEL001 screen is set to 'Y' where the Interface_File_Type on the Tel_Maint_Control table associated with the TEL001 screen is equal to the

global variable captured on the TEL201 screen as the Select_Interface_File_Type, Select_Interface_File_Format and Select_Interface_Item_Type.

#### *4.4.7.1.1 TEL201A - 'G' Schedule Selection Pop-Up Screen Layout*

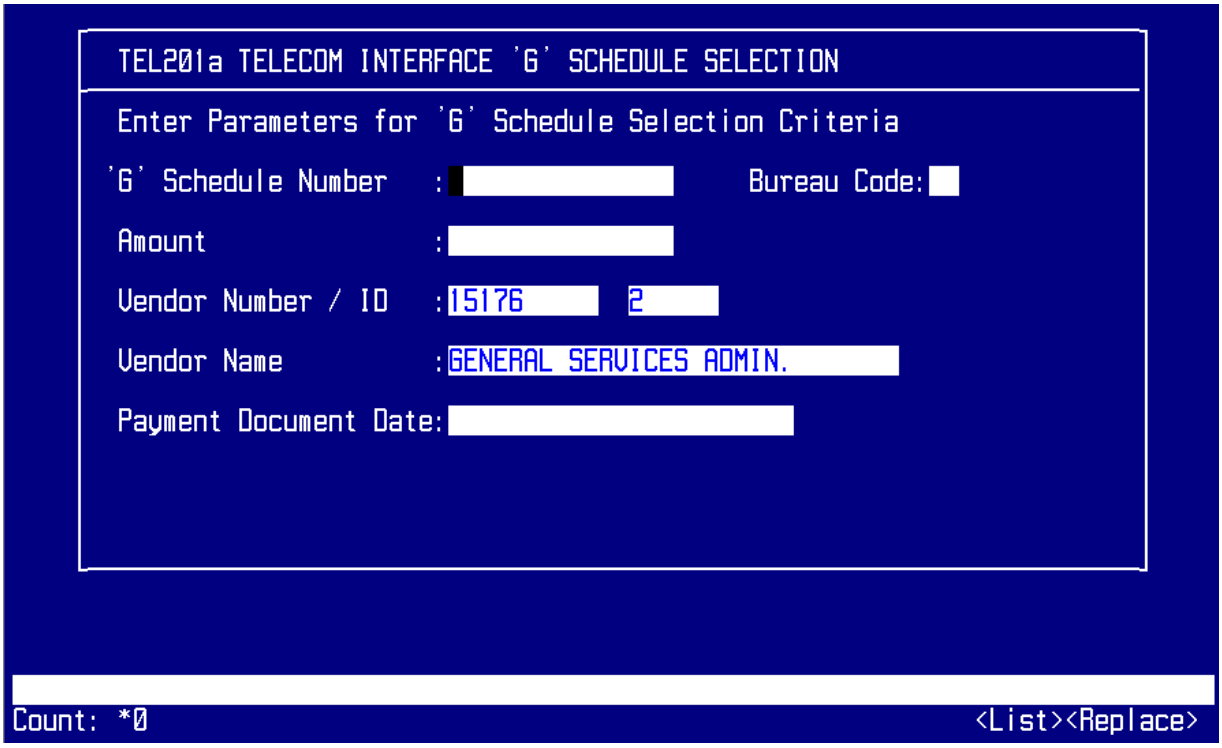



Figure 7.0 - TEL201A - 'G' Schedule Selection Pop-Up Screen Layout

### *4.4.7.2 Operating Rules*

The following sections describe the operating rules applicable to the TEL201A screen. Operating Rules differ from business rules in that they are directly associated with a particular operating as opposed to business rules that are associated more generally with the whole application.

#### *4.4.7.2.1 Create a Record (Select a 'G' Schedule Number)*

Users cannot apply a 'G' Schedule Number' to the invoice records without selecting a value on the ''G' Schedule Number' field.

#### *4.4.7.2.2 Modify a Record*

Users are not allowed to modify a record on the screen.

#### *4.4.7.2.3 Save a Record*

Users are not allowed to save a record on the screen.

#### *4.4.7.2.4 Delete a Record*

Users are not allowed to delete a record on the screen.

#### *4.4.7.2.5 Queries*

- Users can query on the ‘‘G’ Schedule Number’ field.
- Users can query on the ‘Amount’ field.
- Users cannot query on the ‘Vendor’ field.
- Users cannot query on the ‘’Payment Document Date’ field.

### *4.4.7.3 Business Rules*

The following sections describe the business rules applicable to the TEL201A screen.

- Users will have access to the TEL201A screen during the invoice generation process if the maintenance record for the selected interface file type has the OPAC_Flag equal to ‘Y’.
- Users will *NOT* have access to the TEL201A screen during the invoice generation process if the maintenance record for the selected interface file type has the OPAC_Flag equal to ‘N’.
- The Vendor Number and ID displayed on the TEL201A screen must equal the vendor information entered on the Manual Vendor Payment Transaction Screen (PM041).

### *4.4.7.4 Input*

The following sections list all tables needed prior to selection of the ‘G’ Schedule Number process from the TEL201A screen. The table below lists the database tables where the screen is obtaining the information.

| Table Name | Screen | Usage | Record Requirement |
|---|---|---|---|
| Manual_Control | PM041 | Combo Box | ‘G’ Schedule Number from the Schedule_No field on the Manual_Control table |
| Manual_Control | PM041 | Combo Box | Amount from the Amount field on the Manual_Control table |
| Tel_Maint_Vendor | TEL001 | Text Box | Associated vendor information of selected interface file type |
| Manual_Control | PM041 | Text Box | Payment Document Date from the Payment_Document_Date field on the Manual_Control table |

| Table Name | Screen | Usage | Record Requirement |
|---|---|---|---|
| Parameter | N/A | Store Screen Values | N/A |

Table 4.33 - TEL201A (Telecommunications Interface 'G' Schedule Selection Pop-Up) Input

### *4.4.7.5 Processing Logic for the TEL201A Pop-Up*

#### *4.4.7.5.1 TEL201A Pop-Up Processing Logic Overview*

The following document table lists all screen labels and applicable field name (non-base table) within the TEL201A pop-up. All values will be captured in the parameter table.

| Screen Label | Field Name | Type and Size |
|---|---|---|
| 'G' Schedule Number | Schedule_No | Varchar2(15) |
| Amount | Amount | Number (13,2) |
| Vendor | Schedule_Vendor_Number | Number(10) |
| N/A | Schedule_Vendor_ID | Number(6) |
| N/A | Schedule_Vendor_Name | Varchar2(30) |
| Payment Document Date | Schedule_Date | Date |

Table 4.34 - Overview of the Processing Logic for the TEL201A Pop-Up

#### *4.4.7.5.2 TEL201A Pop-Up Processing Logic Detail Review*

The following sections describe the field descriptions and the processing logic for each field associated with the TEL201A pop-up.

| Field Property | Property Value |
|---|---|
| Screen Label | 'G' Schedule Number |
| Purpose | This field captures all Schedule Numbers on PM041 where the control record has not been approved. |
| Field Name | Schedule_No |
| Table Name | N/A |
| Displayed | Yes |
| Format | N/A |
| Required | Value must be selected prior to execution of the process. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Screen Display Format | |
| LOV | Return all values for Schedule_No with an Approved_Flag = 'N' from the Manual_Control table on PM041. |
| Processing Logic | |
| Validation Check | See LOV |

| Field Property | Property Value |
|---|---|
| Validation Rules | See LOV and Required |
| Tab Position | N/A |

| Field Property | Property Value |
|---|---|
| Screen Label | Amount |
| Purpose | This field captures all Amounts (in conjunction with the Schedule_No) on PM041 where the control record has not been approved. |
| Field Name | Amount |
| Table Name | N/A |
| Displayed | Yes. Only the amount associated with the currently highlighted record in the Schedule_No field on TEL201A will be displayed. |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Screen Display Format | |
| LOV | Return all values for Amount with an Approved_Flag = 'N' from the Manual_Control table on PM041. |
| Processing Logic | |
| Validation Check | See LOV |
| Validation Rules | See LOV, Displayed and Required |
| Tab Position | N/A |

| Field Property | Property Value |
|---|---|
| Screen Label | Vendor |
| Purpose | This non-enterable field captures the CFS Vendor Number based upon the selected interface file type setup on TEL001. |
| Field Name | Schedule_Vendor_Number |
| Table Name | N/A |
| Displayed | Yes |
| Format | N/A |
| Required | File must be populated prior to execution of the process. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Screen Display Format | |
| Text Box | Return CFS_Vendor_Number from the Tel_Maint_Vendor table of screen TEL001 where the Interface_File_Type on the Tel_Maint_Control table associated with the TEL001 screen is equal to the global variable captured on the TEL201 screen as the Select_Interface_File_Type. |
| Processing Logic | |
| Validation Check | See Text Box |

| Field Property | Property Value |
|---|---|
| Validation Rules | ▸ See Text Box and Required.<br>▸ Schedule_Vendor_Number must be equal to the Vendor_No on the Manual_Control table. |
| Tab Position | N/A |

| Field Property | Property Value |
|---|---|
| Screen Label | N/A |
| Purpose | This non-enterable field captures the CFS Vendor ID based upon the selected interface file type setup on TEL001. |
| Field Name | Schedule_Vendor_ID |
| Table Name | N/A |
| Displayed | Yes |
| Format | N/A |
| Required | Field must be populated prior to execution of the process. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Screen Display Format | |
| Text Box | Return CFS_Vendor_ID from the Tel_Maint_Vendor table of screen TEL001 where the Interface_File_Type on the Tel_Maint_Control table associated with the TEL001 screen is equal to the global variable captured on the TEL201 screen as the Select_Interface_File_Type. |
| Processing Logic | |
| Validation Check | See Text Box |
| Validation Rules | ▸ See Text Box and Required.<br>▸ Schedule_Vendor_ID must be equal to the Vendor_ID on the Manual_Control table. |
| Tab Position | N/A |

| Field Property | Property Value |
|---|---|
| Screen Label | N/A |
| Purpose | This non-enterable field captures the CFS Vendor Name based upon the selected interface file type setup on TEL001. |
| Field Name | Schedule_Vendor_Name |
| Table Name | N/A |
| Displayed | Yes |
| Format | N/A |
| Required | Field must be populated prior to execution of the process. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Screen Display Format | |

| Field Property | Property Value |
|---|---|
| Text Box | Return CFS_Vendor_Name from the Tel_Maint_Vendor table of screen TEL001 where the Interface_File_Type on the Tel_Maint_Control table associated with the TEL001 screen is equal to the global variable captured on the TEL201 screen as the Select_Interface_File_Type. |
| Processing Logic | |
| Validation Check | See Text Box |
| Validation Rules | See Text Box and Required |
| Tab Position | N/A |

| Field Property | Property Value |
|---|---|
| Screen Label | Payment Document Date |
| Purpose | This non-enterable field captures all Payment Document Dates (in conjunction with the Schedule_No) on PM041 where the control record has not been approved. |
| Field Name | Schedule_Date |
| Table Name | N/A |
| Displayed | Yes. Only the date associated with the currently highlighted record in the Schedule_No field on TEL201A will be displayed. |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Screen Display Format | |
| Text Box | Return all values for Payment_Document_Date with an Approved_Flag = 'N' from the Manual_Control table on PM041. |
| Processing Logic | |
| Validation Check | See Text Box |
| Validation Rules | See Text Box, Displayed and Required |
| Tab Position | N/A |

Table 4.35 - Detailed Review of the Processing Logic for the TEL201A Pop-Up

#### *4.4.7.6 Security*

The existing CAMS/CFS menu security and the CAMS/CFS database roles will be used for implementing the security on the new screens and the objects developed, respectively.

#### *4.4.7.7 Error Handling Messages*

The following table lists the main error and warning messages applicable to the TEL201A screen.

| Message No. | Type | Text |
|---|---|---|
| 1 | Error | Vendor Number and ID established on the Telecommunications Maintenance Screen did not match the vendor information entered on the Manual Vendor Payment Transaction Screen (PM041). |

Table 4.36 - Main Error and Warning Messages for the TEL201A Screen

#### *4.4.7.8 Output*

All data entered or selected on the TEL201A screen will be used as global variables selecting and applying 'G' Schedule Number routines. At the conclusion of processing the global variables will be captured in the Parameter table.

#### *4.4.7.9 Reports*

No reports will be generated as a result of the TEL201A processing.

#### *4.4.7.10 Requirements Met in the Previous Section*

The document table below lists the requirements met by the detailed design. The table references the Telecommunications Interface Services Requirements Version 5.2 for the requirement number, applicable page number and description of the requirement.

| Requirement Number | Page | Description |
|---|---|---|
| CP - 6 | 14 | For all disbursements, the Telecommunications Interface will post the disbursements in CAMS/CFS on PM003. |
| CP - 7 | 14 | The Telecommunications Interface will generate disbursements for non-OPAC payments. |
| CP - 9 | 15 | For all OPAC disbursements, the Telecommunications Interface will allow the user to specify the 'G' schedule number. |
| CP - 10 | 15 | For all non-OPAC disbursements, the Telecommunications Interface will identify the vendor based on the information in the input file. |
| CP - 12 | 15 | The Telecommunications Interface will validate that the vendor is active in the CFS tables. |

Table 4.37 - Requirements Met in the Previous Section

### *4.4.8 Assign Schedule Number Values*

The Tel_Assign_Schedule_No_Values routine is designed to assign the CAMS/CFS default values and the TEL201A selected values as required for the accomplishment of an OPAC record on the CAMS/CFS AP_Detail table associated with PM003.

When executed the Tel_Assign_Schedule_No_Values routine will update specific data fields for all invoice records within the validated and matched telecom input temporary table.

#### *4.4.8.1 Input*

The following sections list all tables needed prior to the execution of the Tel_Assign_Schedule_No_Values routine. The table below lists the database tables that will be accessed by the load routine.

| Table Name | Screen | Usage | Record Requirement |
|---|---|---|---|
| Manual Control | PM041 | Reference | Schedule Number record information |
| Tel_Inv_Header | N/A | Temporary Transaction Table | Capture invoice record values on the validated and matched telecom input temporary table |
| Tel_Inv_Control | N/A | Temporary Transaction Table | Capture invoice record values on the validated and matched telecom input temporary table |
| Tel_Inv_Detail | N/A | Temporary Transaction Table | Capture invoice record values on the validated and matched telecom input temporary table |
| Parameter | N/A | Store Screen Values | N/A |

Table 4.38 - Tel_Assign_Schedule_No_Values Routine Input Tables

#### *4.4.8.2 Processing Logic of the Tel_Assign_Schdedule_No_Values Routine*

The following tables describe the field descriptions of the validated and matched telecom input temporary table.

Only the fields that may be affected by the Tel_Assign_Schedule_No_Values routine will be documented below.

##### *4.4.8.2.1 Tel_Inv_Detail Table Overview*

The document table below describes the detail table of the validated and matched telecom input temporary table Tel_Inv_Detail. Only the fields that may be affected by the Tel_Assign_Schedule_No_Values routine are documented below.

| Field Name | Type and Size | Description |
|---|---|---|
| Schedule_Type | Varchar2(6) | Type of the SP1166 schedule. |
| Schedule_No | Varchar2(15) | The Schedule Number of the Item/MDL. |

Table 4.39 - Overview Processing Logic for the Validated and Matched Telecom Input Temporary Table Detail Table (Tel_Inv_Detail) During the Tel_Assign_Schedule_No_Values Routine

#### *4.4.8.2.2 Tel_Inv_Detail Table Detailed Review*

The document table below describes the processing logic for the columns of the detail table (Tel_Inv_Detail) of the validated and matched telecom input temporary table that are affected by the Tel_Assign_Schedule_No_Values routine.

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture payment schedule type. |
| Field Name | Schedule_Type |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | Yes at the conclusion of the Tel_Assign_Schedule_No_Values routine. |
| System Generated | Yes. Will be set to 'MISC' at the conclusion of the Tel_Assign_Schedule_No_Values routine. |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required and System Generated |
| Validation Rules | See Required and System Generated |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture payment schedule number as recorded in the Schedule_No field as the global variable from the TEL201A screen. |
| Field Name | Schedule_No |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | Yes at the conclusion of the Tel_Assign_Schedule_No_Values routine. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |

| Column Property | Property Value |
|---|---|
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

Table 4.40 - Detailed Review of the Processing Logic for the Validated and Matched Telecom Input Temporary Table Detail Table (Tel_Inv_Detail) During the Tel_Assign_Schedule_No_Values Routine

#### *4.4.8.3 Output*

This section lists the database tables that will be affected by the actions of the Tel_Assign_Schedule_No_Values routine. The table below lists the database tables where the Tel_Assign_Schedule_No_Values routine is creating, updating or deleting data.

| Table Name | Insert | Update | Delete | Comments |
|---|---|---|---|---|
| Tel_Inv_Detail | No | Yes | No | Temporary Transaction Table (for the validated and matched telecom input temporary table). Updated with schedule number specific fields. |

Table 4.41 - Output Tables Affected by the Tel_Assign_Schedule_No_Values Routine

### *4.4.9 FIMA-CAMS ACCS Conversion*

The Tel_FIMA_ACCS_Conversion routine is designed to convert the FIMA accounting codes included on the invoice records to the CAMS/CFS accounting codes.

The Telecommunications Interface utilizes a generic input temporary table structure (Tel_Inv_Header, Tel_Inv_Control and Tel_Inv_Detail) that will accept either the FIMA accounting code structure or the CAMS/CFS accounting code structure.

The Tel_FIMA_ACCS_Conversion routine will initially determine if the columns associated with the CAMS/CFS accounting codes are populated for each invoice record. If these columns are populated the routine will not attempt to convert the values. The Tel_FIMA_ACCS_Conversion routine will stop and the invoice generation processing will move to the next routine.

If the columns associated with the CAMS/CFS accounting codes are not populated the Tel_FIMA_ACCS_Conversion routine will access the FIMA accounting code columns to determine if they are populated. If the FIMA accounting code columns are also not populated the Tel_FIMA_ACCS_Conversion routine will process the invoice records with ‘0's in all CAMS/CFS accounting codes. The Standard Interface error routines will detect the missing data and send the record to an error

correction screen.

If the FIMA accounting code columns are populated the Tel_FIMA_ACCS_Conversion routine will be called to convert the accounting codes. These routines have already been created for other NOAA CAMS interfacing modules. These procedures will have to be copied from another interfacing module and modified to process the Telecommunications Interface invoice records. It is important to note that the User_Define_ACCS column will not have to be converted by the Tel_FIMA_ACCS_Conversion routine. The values in this column will be populated with '0' by the Tel_FIMA_ACCS_Conversion routine.

If the FIMA/CAMS ACCS Conversion procedures are unable to convert the FIMA accounting codes, the Tel_FIMA_ACCS_Conversion routine will process the invoice record with no ACCS codes. The Standard Interface error routines will detect the missing data and send the record to an error correction screen.

#### *4.4.9.1 Input*

The following sections list all tables needed prior to the execution of the Tel_FIMA_ACCS_Conversion routine. The table below lists the database tables that will be accessed by the Tel_FIMA_ACCS_Conversion routine.

| Table Name | Screen | Usage | Record Requirement |
|---|---|---|---|
| Tel_Inv_Header | N/A | Temporary Transaction Table | Capture invoice record values on the validated and matched telecom input temporary table |
| Tel_Inv_Control | N/A | Temporary Transaction Table | Capture invoice record values on the validated and matched telecom input temporary table |
| Tel_Inv_Detail | N/A | Temporary Transaction Table | Capture invoice record values on the validated and matched telecom input temporary table |
| Parameter | N/A | Store Screen Values | N/A |

Table 4.42 - Tel_FIMA_ACCS_Conversion Routine Input Tables

#### *4.4.9.2 Processing Logic of the Tel_FIMA_ACCS_Conversion Routine*

The following tables describe the field descriptions of the validated and matched telecom input temporary table. The Tel_FIMA_ACCS_Conversion routine will convert FIMA ACCS accounting codes into CAMS/CFS accounting codes and assign those values to the existing temporary table when necessary.

Only the fields that may be affected by the Tel_FIMA_ACCS_Conversion

routine will be documented below.

#### *4.4.9.2.1 Tel_Inv_Control Table Overview*

The document table below describes the control table of the validated and matched telecom input temporary table Tel_Inv_Control. Only the fields that may be affected by the Tel_FIMA_ACCS_Conversion routine are documented below.

| Field Name | Type and Size | Description |
|---|---|---|
| Bureau_Code | Number(2) | CAMS/CFS bureau code. |

Table 4.43 - Overview Processing Logic for the Validated and Matched Telecom Input Temporary Table Control Table (Tel_Inv_Control) During the Tel_FIMA_ACCS_Conversion Routine

#### *4.4.9.2.2 Tel_Inv_Control Table Detailed Review*

The document table below describes the processing logic for the columns of the control table (Tel_Inv_Control) of the validated and matched telecom input temporary table that are affected by the Tel_FIMA_ACCS_Conversion routine.

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the Bureau Code associated with the converted CAMS/CFS accounting code. This field will be converted based upon the FIMA Organization Code. |
| Field Name | Bureau_Code |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | Yes if the FIMA/CAMS ACCS Conversion procedures are successful, otherwise the field will be '00'. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

Table 4.44 - Detailed Review of the Processing Logic for the Validated and Matched Telecom Input Temporary Table Control Table (Tel_Inv_Control) During the Tel_FIMA_ACCS_Conversion Routine

#### *4.4.9.2.3 Tel_Inv_Detail Table Overview*

The document table below describes the detail table of the validated and matched telecom input temporary table Tel_Inv_Detail. Only the fields that may be affected by the Tel_FIMA_ACCS_Conversion routine are documented below.

| Field Name | Type and Size | Description |
|---|---|---|
| Project_Code | Varchar2(7) | Project Code portion of ACCS. |
| Task_Code | Varchar2(3) | Task Code portion of ACCS. |
| Org1_Code | Varchar2(2) | Org1 portion of ACCS. |
| Org2_Code | Varchar2(2) | Org2 portion of ACCS. |
| Org3_Code | Varchar2(4) | Org3 portion of ACCS. |
| Org4_Code | Number(2) | Org4 portion of ACCS. |
| Org5_Code | Number(2) | Org5 portion of ACCS. |
| Org6_Code | Number(2) | Org6 portion of ACCS. |
| Org7_Code | Number(2) | Org7 portion of ACCS. |
| Object1_Code | Number(2) | Object 1 portion of ACCS. |
| Object2_Code | Number(2) | Object 2 portion of ACCS. |
| Object3_Code | Number(2) | Object 3 portion of ACCS. |
| Object4_Code | Number(2) | Object 4 portion of ACCS. |
| User_Define_ACCS | Number(6) | User Defined ACCS. |
| FIMA_Org_Code | Varchar2(6) | FIMA Organizational Code. |
| FIMA_Task_Code | Varchar2(6) | FIMA Task Code. |
| FIMA_Phase_Code | Varchar2(2) | FIMA Phase Code. |
| FIMA_Obj_Class | Varchar2(4) | FIMA Object Class. |

Table 4.45 - Overview Processing Logic for the Validated and Matched Telecom Input Temporary Table Detail Table (Tel_Inv_Detail) During the Tel_FIMA_ACCS_Conversion Routine

#### *4.4.9.2.4 Tel_Inv_Detail Table Detailed Review*

The document table below describes the processing logic for the columns of the detail table (Tel_Inv_Detail) of the validated and matched telecom input temporary table that are affected by the Tel_FIMA_ACCS_Conversion routine.

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the Project Code associated with the converted CAMS/CFS accounting code. This field will be converted based upon the FIMA Task Code. |
| Field Name | Project_Code |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes if the FIMA/CAMS ACCS Conversion procedures are successful, otherwise the field will be blank. |
| System Generated | No |

| Column Property | Property Value |
|---|---|
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the Task Code associated with the converted CAMS/CFS accounting code. This field will be converted based upon the FIMA Phase Code. |
| Field Name | Task_Code |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes if the FIMA/CAMS ACCS Conversion procedures are successful, otherwise the field will be blank. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the Level 1 Organization Code associated with the converted CAMS/CFS accounting code. This field will be converted based upon the FIMA Organization Code. |
| Field Name | Org1_Code |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes if the FIMA/CAMS ACCS Conversion procedures are successful, otherwise the field will be blank. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the Level 2 Organization Code associated with the converted CAMS/CFS accounting code. This field will be converted based upon the FIMA Organization Code. |
| Field Name | Org2_Code |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes if the FIMA/CAMS ACCS Conversion procedures are successful, otherwise the field will be blank. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the Level 3 Organization Code associated with the converted CAMS/CFS accounting code. This field will be converted based upon the FIMA Organization Code. |
| Field Name | Org3_Code |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes if the FIMA/CAMS ACCS Conversion procedures are successful, otherwise the field will be blank. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the Level 4 Organization Code associated with the converted CAMS/CFS accounting code. This field will be converted based upon the FIMA Organization Code. |
| Field Name | Org4_Code |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes if the FIMA/CAMS ACCS Conversion procedures are successful, otherwise the field will be blank. |
| System Generated | No |

| Column Property | Property Value |
|---|---|
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the Level 5 Organization Code associated with the converted CAMS/CFS accounting code. This field will be converted based upon the FIMA Organization Code. |
| Field Name | Org5_Code |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes if the FIMA/CAMS ACCS Conversion procedures are successful, otherwise the field will be blank. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the Level 6 Organization Code associated with the converted CAMS/CFS accounting code. This field will be converted based upon the FIMA Organization Code. |
| Field Name | Org6_Code |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes if the FIMA/CAMS ACCS Conversion procedures are successful, otherwise the field will be blank. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the Level 7 Organization Code associated with the converted CAMS/CFS accounting code. This field will be converted based upon the FIMA Organization Code. |
| Field Name | Org7_Code |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes if the FIMA/CAMS ACCS Conversion procedures are successful, otherwise the field will be blank. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the Level 1 Object Code associated with the converted CAMS/CFS accounting code. This field will be converted based upon the FIMA Object Code. |
| Field Name | Object1_Code |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes if the FIMA/CAMS ACCS Conversion procedures are successful, otherwise the field will be blank. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the Level 2 Object Code associated with the converted CAMS/CFS accounting code. This field will be converted based upon the FIMA Object Code. |
| Field Name | Object2_Code |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes if the FIMA/CAMS ACCS Conversion procedures are successful, otherwise the field will be blank. |
| System Generated | No |

| Column Property | Property Value |
|---|---|
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the Level 3 Object Code associated with the converted CAMS/CFS accounting code. This field will be converted based upon the FIMA Object Code. This field should be ‘00' as NOAA does not use the third object code level. |
| Field Name | Object3_Code |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes if the FIMA/CAMS ACCS Conversion procedures are successful, otherwise the field will be blank. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the Level 4 Object Code associated with the converted CAMS/CFS accounting code. This field will be converted based upon the FIMA Object Code. This field should be ‘00' as NOAA does not use the fourth object code level. |
| Field Name | Object4_Code |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes if the FIMA/CAMS ACCS Conversion procedures are successful, otherwise the field will be blank. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | The field will capture the Fiscal Year if supplied on the input data batch and will be assigned during the Tel_Input_Load routine. If not supplied on the input data batch this field will be calculated based upon the Invoice_Date on the Tel_Inv_Control table for the applicable record during the Tel_FIMA_ACCS_Conversion routine. |
| Field Name | Fiscal_Year |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captured the FIMA Organizational Code if available from the input record. After the Tel_FIMA_ACCS_Conversion routine this field will be blank. |
| Field Name | FIMA_Org_Code |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | This field should not be populated after the conclusion of the Tel_FIMA_ACCS_Conversion routine. |

| Column Property | Property Value |
|---|---|
| Purpose | This field captured the FIMA Task Code if available from the input record. After the Tel_FIMA_ACCS_Conversion routine this field will be blank. |
| Field Name | FIMA_Task_Code |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |

| Column Property | Property Value |
|---|---|
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | This field should not be populated after the conclusion of the Tel_FIMA_ACCS_Conversion routine. |

| Column Property | Property Value |
|---|---|
| Purpose | This field captured the FIMA Phase Code if available from the input record. After the Tel_FIMA_ACCS_Conversion routine this field will be blank. |
| Field Name | FIMA_Phase_Code |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | This field should not be populated after the conclusion of the Tel_FIMA_ACCS_Conversion routine. |

| Column Property | Property Value |
|---|---|
| Purpose | This field captured the FIMA_OBJ_CLASS if available from the input record. After the Tel_FIMA_ACCS_Conversion routine this field will be blank. |
| Field Name | FIMA_Obj_Class |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | This field should not be populated after the conclusion of the Tel_FIMA_ACCS_Conversion routine. |

Table 4.46 - Detailed Review of the Processing Logic for the Validated and Matched Telecom Input Temporary Table Detail Table (Tel_Inv_Detail) During the Tel_FIMA_ACCS_Conversion

Routine

#### *4.4.9.3 Output*

This section lists the database tables that will be affected by the actions of the Tel_FIMA_ACCS_Conversion routine. The table below lists the database tables where the Tel_FIMA_ACCS_Conversion routine is creating, updating or deleting data.

| Table Name | Insert | Update | Delete | Comments |
|---|---|---|---|---|
| Tel_Inv_Control | No | Yes | Yes | Temporary Transaction Table (for the validated and matched telecom input temporary table). Updated with CAMS/CFS account code data. |
| Tel_Inv_Detail | No | Yes | Yes | Temporary Transaction Table (for the validated and matched telecom input temporary table). Updated with CAMS/CFS account code data. |

Table 4.47 - Output Tables Affected by the Tel_FIMA_ACCS_Conversion Routine

### *4.4.10 Assign Default Invoice Values*

The Tel_Assign_Default_Invoice_Values routine is designed to accomplish two objectives:

1. Populate default data values that will allow an approved telecommunication invoice record to be successfully recorded in the AP_Detail and AP_Control tables associated with the PM003 screen.
2. Populate Telecommunications Interface specific data values that will ensure that all telecommunication invoice records are easily distinguishable within CAMS/CFS.

#### *4.4.10.1 Input*

The following sections list all tables needed prior to the execution of the Tel_Assign_Default_Invoice_Values routine. The table below lists the database tables that will be accessed by the Tel_Assign_Default_Invoice_Values routine.

| Table Name | Screen | Usage | Record Requirement |
|---|---|---|---|
| Tel_Maint_Control | TEL001 | Base Table | Base table record of the maintenance control table |
| Tel_Maint_Vendor | TEL001 | Base Table | Base table record of the maintenance detail table |
| Tel_Inv_Header | N/A | Temporary Transaction Table | Capture invoice record values on the validated and matched telecom input temporary table |

| Table Name | Screen | Usage | Record Requirement |
|---|---|---|---|
| Tel_Inv_Control | N/A | Temporary Transaction Table | Capture invoice record values on the validated and matched telecom input temporary table |
| Tel_Inv_Detail | N/A | Temporary Transaction Table | Capture invoice record values on the validated and matched telecom input temporary table |
| Payment_Office_Control | PM079 | Payment Office Code Maintenance Table | Active and valid Center Codes, Payment Type and Payment Office Codes |
| Payment_Office_Detail | PM079 | Payment Office Code Maintenance Table | Active and valid Center Codes, Payment Type and Payment Office Codes |
| Parameter | N/A | Store Screen Values | N/A |

Table 4.48 - Tel_Assign_Default_Invoice_Values Routine Input Tables

### *4.4.10.2 Processing Logic of the Tel_Assign_Default_Invoice_Values Routine*

#### *4.4.10.2.1 Tel_Inv_Header Table Overview*

The document table below describes the header table of the validated and matched telecom input temporary table Tel_Inv_Header.

Only the fields that may be affected by the Tel_Assign_Default_Invoice_Values routine are documented below.

| Field Name | Type and Size | Description |
|---|---|---|
| Batch_No | Number | Sequence generated batch number of the Vendor Invoice Transaction data batch. Part of the Primary Key of the table. |
| Interfacing_System | Varchar2(20) | The interfacing system from which the input data batch is transferred to the Standard Interface. |
| Trans_Count | Number(6) | Number of transactions transferred in the data batch. |
| Batch_Total | Number(13,2) | Total amount of all vendor invoice transactions being transmitted. Should be the total of all Amount fields on the control record types. |
| Office_Code | Varchar2(6) | Payment Office Code for which the data batch is transferred. |
| User_Name | Varchar2(30) | User name of the individual who last modified the invoice record in a financial system. |

| Field Name | Type and Size | Description |
|---|---|---|
| Modification_Date | Date | Date the invoice record was last modified in a financial system. |
| Device_Name | Varchar2(30) | Terminal code (ttye, Windows 98). |

Table 4.49 - Overview Processing Logic for the Validated and Matched Telecom Input Temporary Table Header Table (Tel_Inv_Header) During the Tel_Assign_Default_Invoice_Values Routine

#### *4.4.10.2.2 Tel_Inv_Header Table Detailed Review*

The document table below describes the processing logic for the columns of the header table (Tel_Inv_Header) of the validated and matched telecom input temporary table that are affected by the Tel_Assign_Default_Invoice_Values routine.

| Column Property | Property Value |
|---|---|
| Purpose | Primary Key of the table. This field will capture a sequentially generated number that will be applied to all records within the data batch as the records are transferred to the MSI tables. Assigned by the Tel_Assign_Default_Invoice_Values routine based upon the MSI_M00_Header_Batch_No_Seq. |
| Field Name | Batch_No |
| Table Name | Tel_Inv_Header |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | Yes |
| Unique | Yes |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required and Unique |
| Validation Rules | See Required and Unique |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the interfacing system from which the input data batch is transferred to the Standard Interface. This will be populated with the Interface File Type as established on the TEL001 screen by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Interfacing_System |
| Table Name | Tel_Inv_Header |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |

| Column Property | Property Value |
|---|---|
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will calculate the total number of invoice records processed by the Telecommunications Interface. This will be populated by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Trans_Count |
| Table Name | Tel_Inv_Header |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes. This field will be calculated based on the total number of invoice records captured in the Tel_Inv_Control table of the validated and matched telecom temporary table. |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will calculate the total dollar amount of the invoice records processed by the Telecommunications Interface. This will be populated by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Batch_Total |
| Table Name | Tel_Inv_Header |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes. This field will be calculated based on the summation of all values captured in the Unit_Price field on the Tel_Inv_Detail table. |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the payment office code from which the input data batch is transferred to the Standard Interface. This will be populated by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Office_Code |
| Table Name | Tel_Inv_Header |
| Displayed | N/A |
| Format | N/A |
| Required | Yes. The Office_Code will be derived from the Distinct Payment_Office_Code from the Tel_Inv_Detail table. |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the user name of the last individual to run the Telecommunications Interface. This will be populated by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | User_Name |
| Table Name | Tel_Inv_Header |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | Set as Oracle Database User ID |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the date the Telecommunications Interface was run. This will be populated by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Modification_Date |
| Table Name | Tel_Inv_Header |
| Displayed | N/A |
| Format | dd-mon-rrrr |
| Required | Yes |
| System Generated | Yes. Set as TRUNC (SYSDATE). |
| Primary Key | No |
| Unique | No |

| Column Property | Property Value |
|---|---|
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the terminal code through which the input data batch was last modified. This will be populated by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Device_Name |
| Table Name | Tel_Inv_Header |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes. Set as Userenv ('Terminal'). |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

Table 4.50 - Detailed Review of the Processing Logic for the Validated and Matched Telecom Input Temporary Table Header Table (Tel_Inv_Header) During the Tel_Assign_Default_Invoice_Values Routine

#### *4.4.10.2.3 Tel_Inv_Control Table Overview*

The document table below describes the control table of the validated and matched telecom input temporary table Tel_Inv_Control. Only the fields that may be affected by the Tel_Assign_Default_Invoice_Values routine are documented below.

| Field Name | Type and Size | Description |
|---|---|---|
| Batch_No | Number | Sequence generated batch number of the Vendor Invoice Transaction data batch. Part of the Primary Key of the table. |
| Invoice_Type | Varchar2(6) | CAMS/CFS invoice type. |
| Invoice_No | Varchar2(20) | The associated invoice number for the vendor invoice. |
| Sub_Invoice_No | Number(4) | Used to reference a single invoice for multiple purchase orders. |
| Received_Date | Date | The date the proper invoice was received. |
| Document_Source | Varchar2(6) | The source document type. |

| Field Name | Type and Size | Description |
|---|---|---|
| Po_Type | Varchar2(6) | The type of document associated with the Document_Source. |
| Po_No | Number(8) | Match document PO Number associated with the vendor invoice. |
| Release_No | Number(3) | PO release number. |
| Approp_Symbol | Varchar2(21) | CAMS/CFS appropriation symbol for making payment to another Federal type vendor via an SF1080/1081. |
| Agency_Location_Code | Varchar2(10) | CAMS/CFS agency location code. |
| Fastpay_Flag | Varchar2(1) | Flag indicating whether the invoice is subject to the Fast Pay. |
| Prompt_Pay_Flag | Varchar2(1) | Flag indicating whether the invoice is subject to the Prompt Pay Act. |
| Net_Days1 | Number(2) | Net payment days for the first set of payment terms. |
| Discount_Flag1 | Varchar2(1) | Indicates whether the discount is a percent (P) or amount (A). |
| Discount_Amount1 | Number(8,3) | The percent or amount of the discount (based on the amount in the Discount_Flag1 field). |
| Discount_Days1 | Number(2) | Discount days for the first set of payment terms. |
| Net_Days2 | Number(2) | Net payment days for the second set of payment terms. |
| Discount_Flag2 | Varchar2(1) | Indicates whether the discount is a percent (P) or amount (A). |
| Discount_Amount2 | Number(8,3) | The percent or amount of the discount (based on the amount in the Discount_Flag2 field). |
| Discount_Days2 | Number(2) | Discount days for the second set of payment terms. |
| Invoice_Amount | Number(13,2) | The total amount on the invoice from the vendor. |
| Net_Invoice_Amount | Number(13,2) | The total sum of the line item amounts of the invoice.<br><br>Calculated value of all line item amounts (Line_Item_Amount) associated with the vendor invoice. |
| Approved_Flag | Varchar2(1) | Approval status of the vendor invoice. |
| User_Name | Varchar2(30) | User name of the individual who last modified the invoice record in a financial system. |

| Field Name | Type and Size | Description |
|---|---|---|
| Modification_Date | Date | Date the invoice record was last modified in a financial system. |
| Device_Name | Varchar2(30) | Terminal code (ttye, Windows 98). |

Table 4.51 - Overview Processing Logic for the Validated and Matched Telecom Input Temporary Table Control Table (Tel_Inv_Control) During the Tel_Assign_Default_Invoice_Values Routine

#### *4.4.10.2.4 Tel_Inv_Control Table Detailed Review*

The document table below describes the processing logic for the columns of the control table (Tel_Inv_Control) of the validated and matched telecom input temporary table that are affected by the Tel_Assign_Default_Invoice_Values routine.

| Column Property | Property Value |
|---|---|
| Purpose | Foreign key referencing the header table. This field will capture a sequentially generated number that will be applied to all records within the data batch as the records are transferred to the MSI tables. Assigned by the Tel_Assign_Default_Invoice_Values routine based upon the MSI_M00_Header_Batch_No_Seq. |
| Field Name | Batch_No |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | Yes |
| Unique | Yes |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required and Unique |
| Validation Rules | See Required and Unique |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the invoice type of the record. This will be populated with 'Telcom' by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Invoice_Type |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |

| Column Property | Property Value |
|---|---|
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the invoice number of the record. This will be populated by the Tel_Assign_Default_Invoice_Values routine if the Payment_Type on the Tel_Inv_Detail table is equal to ‘SF1081'.<br><br>If the Payment_Type on the Tel_Inv_Detail is equal to ‘EFT’ or ‘Check’ the Invoice_No field will be populated during the Tel_Input_Load routine from the input file. |
| Field Name | Invoice_No |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | FYMONITEM_TYPE |
| Required | Yes |
| System Generated | If Payment_Type on the Tel_Inv_Detail is equal to ‘SF1081' enter a string of characters in the following format: Fiscal Year from the Fiscal_Year field on the Tel_Inv_Detail table for the current record, Month from the Invoice_Date field on the Tel_Inv_Control table for the current record, Item_Type from the Item_Type field on the Tel_Inv_Detail table for the current record.<br><br>If Payment_Type on the Tel_Inv_Detail is equal to ‘EFT' or ‘Check’ do not enter or change the Invoice_No value. |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See System Generated |
| Validation Rules | ▸ Invoice_No and Sub_Invoice_No combination must be unique.<br>▸ Cannot contain characters ‘/’, ‘*’ or ‘RMT’. |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the invoice number of the record. This will be populated by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Sub_Invoice_No |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |

| Column Property | Property Value |
|---|---|
| System Generated | This field will be verified against AP_Control to ensure that the sub-invoice number is unique for each combination of Vendor_No, Vendor_ID and Invoice_No. For each combination of Vendor_No, Vendor_ID and Invoice_No on the Tel_inv_Control table the routine will execute a query on AP_Control for the same Vendor_No, Vendor_ID and Invoice_No. If a duplicate record is found the query will return the highest Sub_Invoice_No from AP_Control. It will update the Sub_Invoice_No on Tel_Inv_Control with the returned Sub_Invoice_No incremented by '1'. The routine will then execute a query on Tel_Inv_Control for the same Vendor_No, Vendor_ID and Invoice_No to determine if other duplicate records are present within the table. If other duplicates are returned the routine will increment their Sub_Invoice_No by '1' to ensure the records are unique within Tel_Inv_Control and AP_Control.<br><br>If the query returns no duplicate records within AP_Control is will set the Sub_Invoice_No to '0'. The routine will then execute a query on Tel_Inv_Control for the same Vendor_No, Vendor_ID and Invoice_No to determine if duplicate records are present within the table. If other duplicates are returned the routine will increment their Sub_Invoice_No by '1' to ensure the records are unique within Tel_Inv_Control. |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See System Generated |
| Validation Rules | Sub_Invoice_No can not be greater than '9999'. If the returned value is '9999' enter '9999' for the record. The record will not pass the Standard Interface validation checks. |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the received date of the invoice record. This will be populated by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Received_Date |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Set equal to the Invoice_Date on the Tel_Inv_Control table. |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the document source of the invoice record. This will be populated with 'NONE' by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Document_Source |
| Table Name | Tel_Inv_Control |

| Column Property | Property Value |
|---|---|
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the matched document type for the invoice record. This will be populated with 'NONE' by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | PO_Type |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the matched document number for the invoice record. This will be populated with '0' (zero) by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | PO_No |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the matched document release number for the invoice record. This will be populated with '0' (zero) by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Release_No |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field is designed to capture the appropriation symbol for making payment to another Federal agency. This field will *NOT* be populated by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Approp_Symbol |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field is designed to capture the agency location code. This field will *NOT* be populated by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Agency_Location_Code |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |

| Column Property | Property Value |
|---|---|
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the fast payment flag for the invoice record. This will be populated with 'N' by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Fastpay_Flag |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the prompt payment flag for the invoice record. This will be populated with 'N' by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Prompt_Pay_Flag |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the net payment days for the first set of terms for the invoice record. This will *NOT* be populated by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Net_Days1 |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | No |

| Column Property | Property Value |
|---|---|
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the discount method for the invoice record. This will *NOT* be populated by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Discount_Flag1 |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the percent or amount of discount for the first set of terms for the invoice record. This will *NOT* be populated by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Discount_Amount1 |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the discount days for the first set of terms for the invoice record. This will *NOT* be populated by the Tel_Assign_Default_Invoice_Values routine. |

| Column Property | Property Value |
|---|---|
| Field Name | Discount_Days1 |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the net payment days for the second set of terms for the invoice record. This will *NOT* be populated by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Net_Days2 |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the discount method for the invoice record. This will *NOT* be populated by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Discount_Flag2 |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the percent or amount of discount for the second set of terms for the invoice record. This will *NOT* be populated by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Discount_Amount2 |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the discount days for the second set of terms for the invoice record. This will *NOT* be populated by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Discount_Days2 |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field is designed to capture the total amount of the invoice record. This field will *NOT* be populated by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Invoice_Amount |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |

| Column Property | Property Value |
|---|---|
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will calculate the sum of the line item amounts of the invoice record. This will be populated by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Net_Invoice_Amount |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Add the Unit_Price from the Tel_Inv_Detail table for all line items where the Trans_No is equal on the Tel_Inv_Control and Tel_Inv_Detail tables. |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the approval flag for the invoice record. This will be populated with 'Y' by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Approved_Flag |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the user name of the last individual to run the Telecommunications Interface. This will be populated by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | User_Name |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |

| Column Property | Property Value |
|---|---|
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | Set as Oracle Database User ID |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the date the Telecommunications Interface was run. This will be populated by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Modification_Date |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | dd-mon-rrrr |
| Required | Yes |
| System Generated | Yes. Set as TRUNC (SYSDATE). |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the terminal code through which the input data batch was last modified. This will be populated by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Device_Name |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes. Set as Userenv ('Terminal'). |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

Table 4.52 - Detailed Review of the Processing Logic for the Validated and Matched Telecom Input Temporary Table Control Table (Tel_Inv_Control) During the Tel_Assign_Default_Invoice_Values Routine

#### *4.4.10.2.5 Tel_Inv_Detail Table Overview*

The document table below describes the detail table of the validated and matched telecom input temporary table Tel_Inv_Detail. Only the fields that may be affected by the Tel_Assign_Default_Invoice_Values routine are documented below.

| Field Name | Type and Size | Description |
|---|---|---|
| Batch_No | Number | Sequence generated batch number of the Vendor Invoice Transaction data batch. Part of the Primary Key of the table. |
| Item_Type | Varchar2(6) | The item type for the detail line of the vendor invoice. |
| Line_No | Number(3) | The Multiple Distribution Line (MDL) number for the detail line of the vendor invoice. |
| RI_Method | Varchar2(1) | Indicates whether the line item is (Q) quantity or (D) dollar based. |
| Default_Matching_Flag | Varchar2(1) | Indicates whether default matching should be used or not. |
| PO_Flag | Varchar2(1) | Indicates whether the vendor invoice should be matched against a Purchase Order document or not. |
| RT_Flag | Varchar2(1) | Indicates whether the vendor invoice should be matched against a Receiving Ticket document or not. |
| AC_Flag | Varchar2(1) | Indicates whether the vendor invoice should be matched against a Acceptance document or not. |
| Prompt_Pay_Type | Varchar2(6) | Prompt pay type for this item. |
| Trade_In | Varchar2(1) | Indicates whether the line item is a trade in or not. |
| V1099_Flag | Varchar2(1) | Indicates whether the line item is included on a vendor 1099 or not. |
| Withhold_Flag | Varchar2(1) | Indicates whether the line item is a withhold item or not. |
| Withhold_Percent | Number(4,2) | Indicates the percent of the line item to withhold. |
| Discount_Flag | Varchar2(1) | Indicates whether the line item is subject to a discount or not. |
| Holdback_Flag | Varchar2(1) | Indicates whether the line item is subject to a holdback or not. |
| Holdback_Amount | Number(13,2) | Indicates the amount of holdback. |
| Holdback_Type | Varchar2(1) | Identifies the type of holdback. |

| Field Name | Type and Size | Description |
|---|---|---|
| Emp_No | Number(6) | Employee number associated with this line item. |
| Fiscal_Year | Number(4) | The Fiscal Year in which the funds for the line item will be taken from. |
| GL_End_Date | Date | The GL period under which the transaction will fall. |
| Qty | Number(9,3) | Quantity for the account distribution. |
| Line_Item_Amount | Number(13,2) | Line item amount. |
| Schedule_Type | Varchar2(6) | Type of the SF1166 schedule. |
| Schedule_No | Varchar2(15) | The Schedule Number of the Item/MDL. |
| Schedule_Date | Date | The date of the Schedule Number of the Item/MDL. |
| User_Name | Varchar2(30) | User name of the individual who last modified the invoice record in a financial system. |
| Modification_Date | Date | Date the invoice record was last modified in a financial system. |
| Device_Name | Varchar2(30) | Terminal code (ttye, Windows 98). |

Table 4.53 - Overview Processing Logic for the Validated and Matched Telecom Input Temporary Table Detail Table (Tel_Inv_Detail) During the Tel_Assign_Default_Invoice_Values Routine

#### *4.4.10.2.6 Tel_Inv_Detail Table Detailed Review*

The document table below describes the processing logic for the detail table of the validated and matched telecom input temporary table Tel_Inv_Detail. Only the fields that may be affected by the Tel_Assign_Default_Invoice_Values routine are documented below.

| Column Property | Property Value |
|---|---|
| Purpose | Foreign key referencing the control table. This field will capture a sequentially generated number that will be applied to all records within the data batch as the records are transferred to the MSI tables. Assigned by the Tel_Assign_Default_Invoice_Values routine based upon the MSI_M00_Header_Batch_No_Seq. |
| Field Name | Batch_No |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | Yes |
| Unique | Yes |
| Default Value | N/A |
| Processing Logic | |

| Column Property | Property Value |
|---|---|
| Validation Check | See Required and Unique |
| Validation Rules | See Required and Unique |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the item type of the line item. This will be populated by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Item_Type |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Item_Type on the Tel_Inv_Detail table is equal to the data captured in the global variable for the Select_Interface_Item_Type on the TEL201 screen. |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the multiple distribution line (MDL) for the line item. This will be populated with ‘1' (one) by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Line_No |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the RI method (quantity or dollar) for the line item. This will be populated with ‘Q' by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | RI_Method |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |

| Column Property | Property Value |
|---|---|
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the default matching flag for the line item. This will be populated with 'N' by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Default_Matching_Flag |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture whether the line item is matched against a purchase order. This will be populated with 'N' by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | PO_Flag |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture whether the line item is matched against a receiving ticket. This will be populated with 'N' by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | RT_Flag |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture whether the line item is matched against an acceptance document. This will be populated with 'N' by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | AC_Flag |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the prompt pay type for the line item. This will be populated with 'STD' by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Prompt_Pay_Type |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |

| Column Property | Property Value |
|---|---|
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture whether the line item is a trade in. This will be populated with 'N' by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Trade_In |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture whether the line item is included on a vendor 1099. This will be populated with 'N' by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | V1099_Flag |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture whether the line item is subject to withholding. This will be populated with 'N' by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Withhold_Flag |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |

| Column Property | Property Value |
|---|---|
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture whether the withhold percentage of the line item. This will *NOT* be populated by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Withhold_Percent |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture whether the line item is subject to a discount. This will be populated with 'N' by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Discount_Flag |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture whether the line item is subject to a holdback. This will be populated with 'N' by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Holdback_Flag |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |

| Column Property | Property Value |
|---|---|
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the amount of holdback for the line item. This will be populated with a 'NULL' value by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Holdback_Amount |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the holdback type of the line item. This will be populated with a 'NULL' value by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Holdback_Type |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the employee number associated with the line item. This will *NOT* be populated by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Emp_No |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the general ledger end date of the line item. This will *NOT* be populated by the Tel_Assign_Default_Invoice_Values routine. This value will be derived by the Standard Interface. |
| Field Name | GL_End_Date |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the quantity of the account distribution for the line item. This will be populated with ‘1' (one) by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Qty |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |

| Column Property | Property Value |
|---|---|
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the schedule type for the line item. This will be populated with 'MISC' by the Tel_Assign_Default_Invoice_Values routine if not already populated by the Tel_Assign_Schedule_No_Values routine. |
| Field Name | Schedule_Type |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | Determine if populated. |
| Validation Rules | ▸ If already populated do not assign a value during the Tel_Assign_Default_Invoice_Values routine.<br>▸ If not populated assign 'MISC' during the Tel_Assign_Default_Invoice_Values routine. |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the schedule number for the line item. This will be populated with '0' (zero) by the Tel_Assign_Default_Invoice_Values routine if not already populated by the Tel_Assign_Schedule_No_Values routine. |
| Field Name | Schedule_No |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | Determine if populated. |
| Validation Rules | ▸ If already populated do not assign a value during the Tel_Assign_Default_Invoice_Values routine.<br>▸ If not populated assign '0' (zero) during the Tel_Assign_Default_Invoice_Values routine. |

| Column Property | Property Value |
|---|---|
| Purpose | This will be *NOT* populated by the Telecommunications Interface routine. |
| Field Name | Schedule_Date |
| Table Name | Tel_Inv_Control |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the user name of the last individual to run the Telecommunications Interface. This will be populated by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | User_Name |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | Set as Oracle Database User ID |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the date the Telecommunications Interface was run. This will be populated by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Modification_Date |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | dd-mon-rrrr |
| Required | Yes |
| System Generated | Yes. Set as TRUNC (SYSDATE). |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |

| Column Property | Property Value |
|---|---|
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the terminal code through which the input data batch was last modified. This will be populated by the Tel_Assign_Default_Invoice_Values routine. |
| Field Name | Device_Name |
| Table Name | Tel_Inv_Detail |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes. Set as Userenv ('Terminal'). |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

Table 4.54 - Detailed Review of the Processing Logic for the Validated and Matched Telecom Input Temporary Table Detail Table (Tel_Inv_Detail) During the Tel_Assign_Default_Invoice_Values Routine

### *4.4.10.3 Output*

This section lists the database tables that will be affected by the actions of the Tel_Assign_Default_Invoice_Values routine. The table below lists the database tables where the Tel_Assign_Default_Invoice_Values routine is creating, updating or deleting data.

| Table Name | Insert | Update | Delete | Comments |
|---|---|---|---|---|
| Tel_Inv_Header | No | Yes | No | Temporary Transaction Table (for the validated and matched telecom input temporary table). |
| Tel_Inv_Control | No | Yes | No | Temporary Transaction Table (for the validated and matched telecom input temporary table). |
| Tel_Inv_Detail | No | Yes | No | Temporary Transaction Table (for the validated and matched telecom input temporary table). |

Table 4.55 - Output Tables Affected by the Tel_Assign_Default_Invoice_Values Routine

## *4.4.11 Generate Telecom Invoice Output Table*

The Tel_Invoice_Output_Generate routine is the last routine to be executed by the Telecommunications Interface Invoice Generation Process against the

records within the temporary table. It is designed to copy all data within the validated and matched telecom input temporary table, that has been fully populated and reformatted, into an Oracle Intermediary table.

The following columns will not be copied to the Standard Interface tables as these columns are only used for Telecommunications Interface processing:

| Table Name | Field Name | Type and Size | Description |
|---|---|---|---|
| Tel_Inv_Control | Input_Vendor_Code | Varchar2(16) | Input Vendor Code. |
| Tel_Inv_Detail | FIMA_Org_Code | Varchar2(6) | FIMA Organizational Code. |
| Tel_Inv_Detail | FIMA_Task_Code | Varchar2(6) | FIMA Task Code. |
| Tel_Inv_Detail | FIMA_Phase_Code | Varchar2(2) | FIMA Phase Code. |
| Tel_Inv_Detail | FIMA_Obj_Class | Varchar2(4) | FIMA Object Class. |

Table 4.56 - Telecommunications Interface Table Columns That Will Not Be Copied

#### *4.4.11.1 Input*

The following sections list all tables needed prior to the execution of the Tel_Invoice_Output_Generate routine. The table below lists the database tables that will be accessed by the Tel_Invoice_Output_Generate routine.

| Table Name | Screen | Usage | Record Requirement |
|---|---|---|---|
| Interface_Control | INT001 | Reference | Active and valid item type |
| Interface_Dir_Detail | INT001 | Reference | Active and valid employee records |
| Interface_User_Detail | INT001 | Reference | Active and valid directory locations |
| Tel_Maint_Control | TEL001 | Base Table | Base table record of the maintenance control table |
| Tel_Maint_Vendor | TEL001 | Base Table | Base table record of the maintenance detail table |
| Tel_Inv_Header | N/A | Temporary Transaction Table | Capture invoice record values on the validated and matched telecom input temporary table |
| Tel_Inv_Control | N/A | Temporary Transaction Table | Capture invoice record values on the validated and matched telecom input temporary table |
| Tel_Inv_Detail | N/A | Temporary Transaction Table | Capture invoice record values on the validated and matched telecom input temporary table |

Table 4.57 - Tel_Invoice_Output_Generate Routine Input Tables

#### *4.4.11.2 Processing Logic of the Telecom Invoice Output Table*

All fields within the three tables of the validated and matched telecom temporary table will be affected by the Tel_Invoice_Output_Generate routine. Therefore, details of the processing logic will not be documented below.

#### *4.4.11.3 Output*

This section lists the database tables that will be affected by the actions of the Tel_Invoice_Output_Generate routine. The table below lists the database tables where the Tel_Invoice_Output_Generate routine is creating, updating or deleting data.

| Table Name | Insert | Update | Delete | Comments |
|---|---|---|---|---|
| MSI_M00_Header | Yes | Yes | No | Standard Interface Oracle Intermediary Tables to be used to transfer telecommunications invoice records |
| MSI_M01_Control | Yes | Yes | No | Standard Interface Oracle Intermediary Tables to be used to transfer telecommunications invoice records |
| MSI_M02_Detail | Yes | Yes | No | Standard Interface Oracle Intermediary Tables to be used to transfer telecommunications invoice records |

Table 4.58 - Output Tables Affected by the Tel_Invoice_Output_Generate Routine

### *4.4.12 Generate Invoice Generation Processing Status Report*

After the Tel_Invoice_Output_Generate routine is complete the Telecommunications Interface will call the Tel_Invoice_Generation_Status_Report routine. This routine will generate the Invoice Generation Status Report (TEL201b) and write the report to the directory as specified on the INT001 screen. The Invoice Generation Status Report will capture overall invoice generation processing success and failure, total number of invoice records read and the total dollar figure of the processed invoice records. The purpose of the report is to provide end-users with a summary of the invoice generation processing results.

At the conclusion of the routine the validated and matched telecom temporary table will be deleted. For input data batches that utilize Oracle intermediary tables instead of ASCII files the Processed_Flag field will also be updated to ‘Y’.

Depending upon the reporting selection entered on the TEL201 screen this report will be sent directly to a printer or e-mailed to the end-users e-mail account. Reports that are e-mailed will be designed to be imported into Microsoft Excel similar to the logic developed for QR101 reports.

#### *4.4.12.1 Input*

The following sections list all tables needed prior to the execution of the Tel_Invoice_Generation_Status_Report routine. The table below lists the database tables that will be accessed by the routine.

| Table Name | Screen | Usage | Record Requirement |
|---|---|---|---|
| Tel_Inv_Header | N/A | Reference | Record values captured in the header table of the validated and unmatched telecom input temporary table |
| Tel_Inv_Control | N/A | Reference | Record values captured in the control table of the validated and unmatched telecom input temporary table |
| Tel_Inv_Detail | N/A | Reference | Record values captured in the detail table of the validated and unmatched telecom input temporary table |
| Tel_Maint_Control | TEL001 | Reference | Interface File Types from active and valid header records |
| Tel_Maint_Vendor | TEL001 | Reference | Associated vendor information of selected interface file type |
| Parameter | N/A | Store Screen Values | N/A |

Table 4.59 - Tel_Invoice_Generation_Status_Report Routine Input Tables

### *4.4.12.2 Report Format*

The following is the screen shot of the TEL201b - Telecommunications Interface Invoice Generation Status Report. The report will capture the processing results of the most recent invoice generation processing routines.

**Subject: Invoice Generation report results**
**Date:** Wed, 11 Sep 2002 11:16:11 -0400 (EDT)
**From:** CAMS-MAIL-CENTER@rdc.noaa.gov

```
CREATION RUN DATE: 09/11/2002          COMMERCE ADMINISTRATIVE MANAGEMENT SYSTEM          USER ID: OPS$NFROBLEG
        REPORT ID: TEL201R          NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION          PAGE :      1
          INSTANCE: GP2                    TEL201b - CAMS/CFS TELECOMMUNICATIONS
                                          INTERFACE INVOICE GENERATION STATUS REPORT

Criteria:

      Interface File Type Processed:    NWS

                 Name File Processed:   TIScript39Stepl.txt

                 Item Type Processed:   NWSMIS

     Batch Number of File Processed:    417


             Summary of Processing:                    Total Number of       Total Dollar Figure of
                                                       Processed Records     Process Records

                                                                8                   $224.43


                                                       ***** END OF THE REPORT *****
```

Figure 8.0 - Layout of the TEL201b - Invoice Generation Status Report

### *4.4.12.3 TEL201b - Invoice Generation Processing Status Report Processing Logic*

#### *4.4.12.3.1 TEL201b - Invoice Generation Processing Status Report Overview*

The document table below provides an overview of the processing logic associated with the columns on the TEL201b - Invoice Generation Status Report.

| Report Label | Field Name | Type and Size |
|---|---|---|
| Creation Run Date | Date | Date |
| Report ID | Report_ID | Varchar2(10) |
| Instance | Instance | Varchar2(10) |
| User ID | User_ID | Varchar2(30) |
| Page | Page | Varchar2(3) |
| Interface File Type Processed: | Processed_Interface_File_Type | Varchar2(4) |
| Name/Batch Number of File Processed: | Processed_File_Name_Batch | Varchar2(30) |
| Interface Item Type Processed: | Processed_Interface_Item_Type | Varchar2(6) |

| Report Label | Field Name | Type and Size |
|---|---|---|
| Total Number of Processed Records | No_Records_Processed | Number(5) |
| Total Dollar Figure of Processed Records | Total_Dollar_Figure | Number(12,2) |

Table 4.60 - Overview Processing Logic for the TEL201b - Invoice Generation Status Report

#### *4.4.12.3.2 TEL201b - Invoice Generation Processing Status Report Detailed Review*

The document table below describes in detail the processing logic associated with the columns shown in the TEL201b - Invoice Generation Status Report.

| Field Property | Property Value |
|---|---|
| Report Label | Creation Run Date: |
| Purpose | This field captures the execution date of the report. This field is part of the header record of the report. |
| Field Name | Date |
| Table Name | N/A |
| Format | DD-MON-RRRR, Left Align |
| Calculation Logic | System generated based upon the system date. |

| Field Property | Property Value |
|---|---|
| Report Label | Report ID: |
| Purpose | This field captures the report ID within CAMS/CFS. This field is part of the header record of the report. |
| Field Name | Report_ID |
| Table Name | N/A |
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Instance: |
| Purpose | This field captures the instance in which the report was generated. This field is part of the header record of the report. |
| Field Name | Instance |
| Table Name | N/A |
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | User ID: |
| Purpose | This field captures the Oracle Database User ID of the end-user that initiated the original execution of the processing that generated the report. This field is part of the header record of the report. |
| Field Name | User_ID |

| Field Property | Property Value |
|---|---|
| Table Name | N/A |
| Format | Right Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Page: |
| Purpose | This field captures the page number of the report. This field is part of the header record of the report. |
| Field Name | Page |
| Table Name | N/A |
| Format | 999, Right Align |
| Calculation Logic | System generated based on the number of pages for the report. |

| Field Property | Property Value |
|---|---|
| Report Label | Interface File Type Processed: |
| Purpose | This field captures the Select_Interface_File_Type as selected on the TEL201 screen. |
| Field Name | Processed_Interface_File_Type |
| Table Name | N/A |
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Interface Item Type Processed: |
| Purpose | This field captures the Select_Interface_Item_Type as selected on the TEL201 screen. |
| Field Name | Processed_Interface_Item_Type |
| Table Name | N/A |
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Name/Batch Number of File Processed: |
| Purpose | This field captures the Select_File_To_Process as selected on the TEL201 screen if the Record_Format_ASCII field on the Tel_Maint_Control table associated with the TEL001 screen for the selected interface file type is set to 'Y'.<br><br>**This field captures the Select_Input_Date as selected on the TEL201 screen if** the Record_Format_Table field on the Tel_Maint_Control table associated with the TEL001 screen for the selected interface file type is set to 'Y'. |
| Field Name | Processed_File_Name_Batch |
| Table Name | N/A |
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Total Number of Processed Records |
| Purpose | This field captures the total number of invoice control records captured in the Tel_Inv_Control table of the validated and matched telecom temporary table. By referencing the number invoice control records the number will correspond to the number on invoice control records to be generated in CAMS/CFS. |
| Field Name | No_Records_Processed |
| Table Name | N/A |
| Format | Center Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Total Dollar Figure of Processed Records |
| Purpose | This field calculates the total dollar figure of line items captured in the Tel_Inv_Detail table of the validated and matched telecom temporary table. |
| Field Name | Total_Dollar_Figure |
| Table Name | N/A |
| Format | $999,999,999,999.99, Center Align |
| Calculation Logic | Summation of all values captured in the Unit_Price field on the Tel_Inv_Detail table. |

Table 4.61 - Detailed Review Processing Logic for the TEL201b - Invoice Generation Status Report

#### *4.4.12.4 Output*

This section lists the database tables that will be affected by the actions of the Tel_Invoice_Generation_Status_Report routine. The table below lists the database tables where the Tel_Invoice_Generation_Status_Report routine is creating, updating or deleting data.

| Table Name | Insert | Update | Delete | Comments |
|---|---|---|---|---|
| Tel_Inv_Header | No | No | Yes | Temporary Transaction Table (for the validated and matched telecom input temporary table) |
| Tel_Inv_Control | No | No | Yes | Temporary Transaction Table (for the validated and matched telecom input temporary table) |
| Tel_Inv_Detail | No | No | Yes | Temporary Transaction Table (for the validated and matched telecom input temporary table) |

Table 4.62 - Output Tables Affected by the Tel_Invoice_Generation_Status Report Routine

### *4.4.13 Requirements Met in Previous Sections*

The document table below lists the requirements met by the detailed design. The table references the Telecommunications Interface Services

Requirements Version 5.2 for the requirement number, applicable page and description of the requirement.

| Requirement Number | Page | Description |
|---|---|---|
| CP - 8 | 14 | The Telecommunications Interface will generate disbursements for OPAC payments. |
| CP - 11 | 15 | For all non-OPAC disbursements, the Telecommunications Interface will place the remittance information for the vendor in the CAMS/CFS invoice number field. |
| CP - 13 | 16 | For all file formats that do not contain the CAMS/CFS accounting code structure, the Telecommunications Interface will convert the FIMA accounting code to the CAMS/CFS accounting codes. |
| CP - 15 | 17 | The Telecommunications Interface will pass disbursement information to CAMS/CFS through a standard mechanism, either the existing IVP routine or the to-be-developed Standard Interface. |

Table 4.63 - Requirements Met in the Previous Section

## 4.5 Telecommunications Interface Invoice Generation Processing Risks

- In order for vendor payments to be successfully linked to shell invoices that have been generated by estimated accrual records the Reference Number (FIMA Document Number) must be consistent throughout the entire fiscal year. If this value is not consistent the records will not be linked and the shell invoices and estimated accrual records will have to be manually reversed.
- The Telecommunications Interface does not perform any validations of the vendor or accounting information against CAMS/CFS. If any errors are included within the input files that information will be passed to the Standard Interface where the record(s) will fail and will have to be corrected individually. 'Mass Change' functionality, the ability to modify multiple records simultaneously, is currently not available in the Standard Interface.

## 4.6 Telecommunications Interface Invoice Generation Processing Issues

- The TELOPS system will not be available in the production environment prior to the 'go-live' date for CAMS/CFS. Therefore, it will be necessary to process the FTS2001 flat file that is produced by NWS. The Telecommunications Interface is not designed to process the FTS2001 file in it's current format. A workaround will have to be developed to process these records.

- The data that is received for DOT Travel Subsidy Payments does not contain all of the information required to generate a CAMS/CFS vendor invoice and therefore can not be readily made into the format needed for processing by the Telecommunications Interface. A workaround will have to be developed to process these records.

# 5 Telecommunications Interface One-Month Basis Estimated Accrual Generation

## 5.1 Purpose of Telecommunications Interface One-Month Basis Estimated Accrual Generation

The Telecommunications Interface One-Month Basis Estimated Accrual Generation process will allow users to generate one month of estimated accrual records based on a previous month's invoice records. The TEL202 (Telecommunications Interface One-Month Basis Estimated Accrual Initiation Screen) will be used to execute the one-month basis estimated accrual generation process. The end-users will have the ability to select the interface file type, the month on which to base the estimates and the month for which to generate the estimated accrual records.

## 5.2 Process Flow of Telecommunications Interface One-Month Basis Estimated Accrual Generation

The following diagrams illustrate the typical Telecommunications Interface One-Month Basis Estimated Accrual Generation processes flow as outlined in the listing below:

1. Validate unique parameters
2. Determine estimated accrual records
3. Assign default estimated accrual values
4. Generate the telecommunications interface output table
5. Generate the one-month basis estimated accrual generation processing report

### *5.2.1 Telecommunications Interface One-Month Basis Estimated Accrual High Level Process Flow*

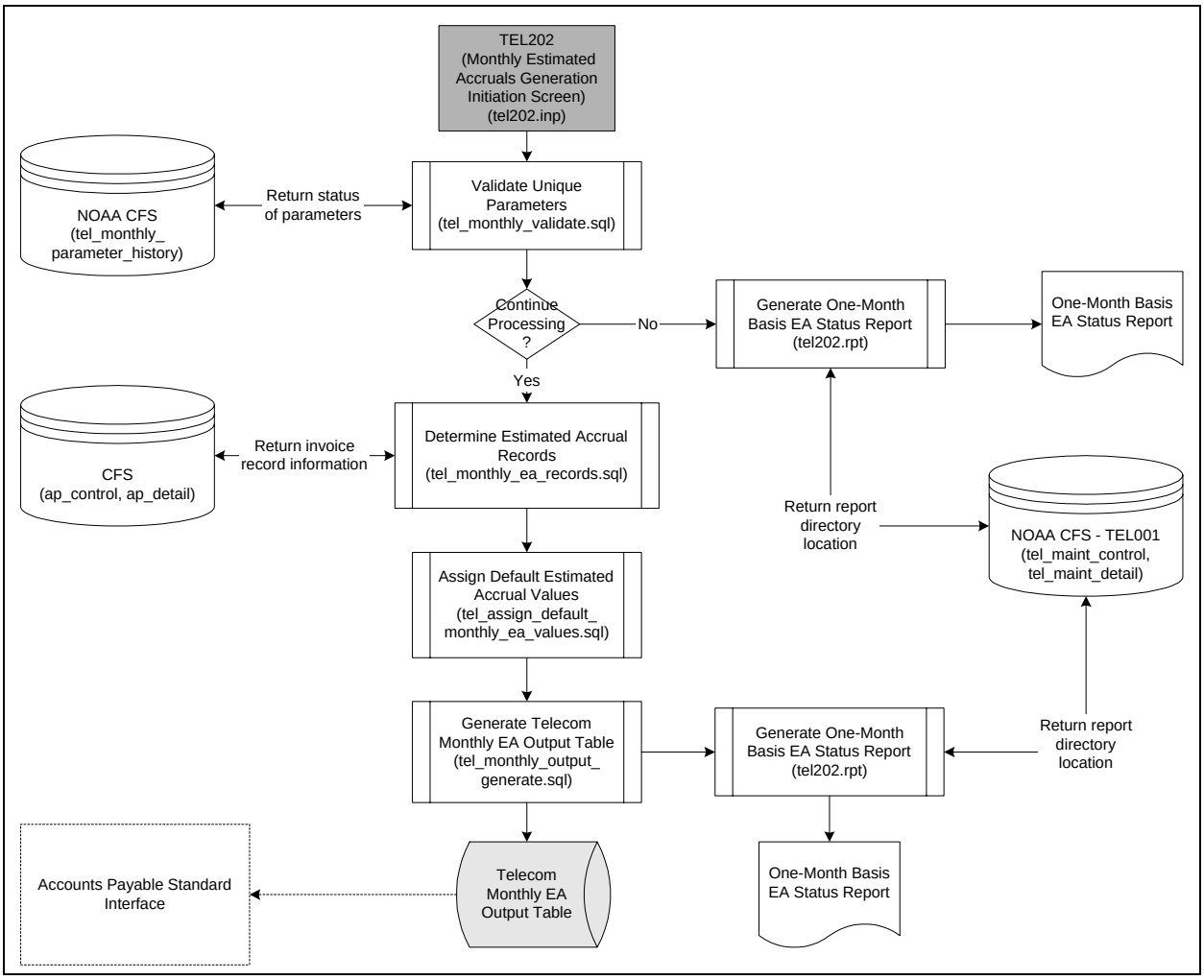



Figure 9.0 - One-Month Basis Estimated Accrual Process Flow

## 5.3 Telecommunications Interface One-Month Basis Estimated Accrual Generation Sub-Processing Logic

### *5.3.1 TEL202 - One-Month Basis Estimated Accruals Generation Initiation Screen*

#### *5.3.1.1 Form Layout*

The TEL202 screen will be developed as a Character screen using Oracle Forms Version 3.0. The TEL202 screen will be used to execute the one-month basis estimated accrual generation processing. The execution routine called by this screen, in turn will call all of the routines necessary to complete the processing of the one-month basis estimated accrual records into Standard Interface ready estimated accrual records. The screen is comprised of one data block that will be used to enter the requested parameters that shape the processing.

##### *5.3.1.1.1 TEL202 - Telecommunications Interface One-Month Basis Estimated Accrual Initiation Screen Layout*

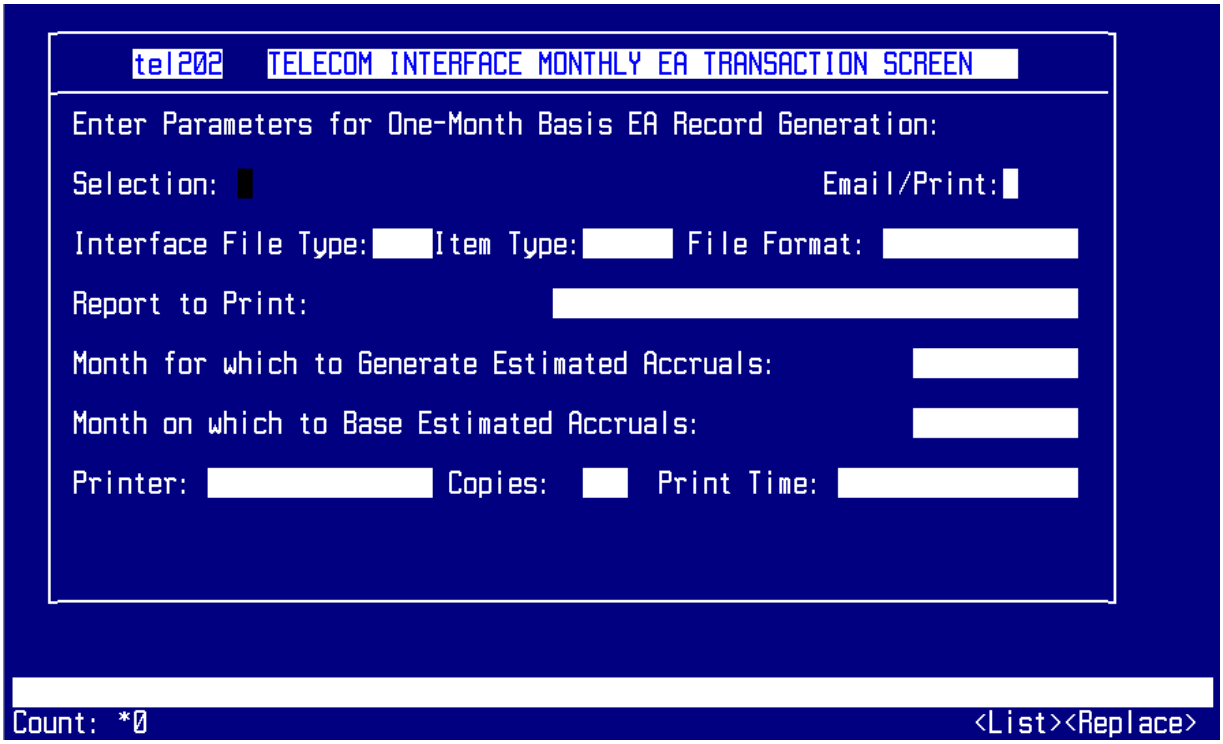



Figure 10.0 - TEL202 - Telecommunications Interface One-Month Basis Estimated Accrual Initiation Screen Layout

#### *5.3.1.2 Operating Rules*

The following sections describe the operating rules applicable to the TEL202 screen. Operating Rules differ from business rules in that they are directly associated with a particular operation as opposed to business rules that are associated more generally with the whole application.

##### *5.3.1.2.1 Create a Record (Initiate One-Month Basis Estimated Accrual Process)*

- Users are allowed to select the interface file type from a list of values.
- Users are allowed to select the interface item type from a list of values based upon the interface file type and interface file format selected.
- Users are allowed to select the interface file format from a list of values based upon the interface file type selected.
- Users are allowed to select the General Ledger End Date of the month for which to generate estimated accrual records.
- Users are allowed to select the General Ledger End Date of the month on which to base the generation of the estimated accrual records.
- Users are able to e-mail or print current processing status reports.
- Users are able to e-mail or print previously generated One-Month Basis Estimated Accrual Processing Status Report from the initiation screen.

##### *5.3.1.2.2 Modify a Record*

Users are not allowed to modify a record on this screen.

##### *5.3.1.2.3 Save a Record*

Users are not allowed to save a record on this screen.

##### *5.3.1.2.4 Delete a Record*

Users are not allowed to delete a record on this screen.

##### *5.3.1.2.5 Queries*

Users are not allowed to query on this screen.

#### *5.3.1.3 Business Rules*

The TEL202 screen will be used to generate one month of estimated accrual records for a specified line item type based upon one month of invoice records.

- Only authorized and established end-users will have access to this screen.
- This process can be executed as many times as needed by an authorized and established end-user.
- Zero and negative estimated accrual amounts will not be generated by the Telecommunications Interface.
- This process can only be executed for months after October 2002, as historical data (FY 01) will not exist in CFS for the Invoice Type 'TELCOM'.
- Estimated accrual records can only be generated within the current fiscal year based upon invoice records recorded within the current fiscal year.

#### *5.3.1.4 Input*

The following sections list all tables needed prior to executing the one-month basis estimated accrual generation process from the TEL202 screen. The table below lists the database tables where the screen is obtaining the information.

| Table Name | Screen | Usage | Record Requirement |
|---|---|---|---|
| Tel_Maint_Control | TEL001 | LOV | Item Types from active and valid header records |
| Interface_Control | INT001 | Reference | Active and valid item type |
| Interface_Dir_Detail | INT001 | Reference | Active and valid employee records |
| Interface_User_Detail | INT001 | Reference | Active and valid directory locations |
| AP_Control | PM003 | Reference | Invoice record details |
| AP_Detail | PM003 | Reference | Invoice record details |
| Tel_Monthly_Validate_Parameter | TEL202 | Reference | History of TEL202 execution parameters |
| Parameter | N/A | Store Screen Values | N/A |

Table 5.0 - TEL202 (Telecommunications Interface One-Month Basis Estimated Accrual Initiation Screen) Input Tables

### *5.3.1.5 Processing Logic for the TEL202 Screen*

#### *5.3.1.5.1 TEL202 Screen Processing Logic Overview*

The following document table lists all screen labels and applicable field names (non-base table) within the TEL202 screen. All values will be captured in the parameter table.

| Screen Label | Field Name | Type and Size |
|---|---|---|
| Selection | Selection | Varchar2(1) |
| Email/Print | Report_Form | Varchar2(1) |
| Select Interface File Type to Process | Select_Interface_File_Type | Varchar2(4) |
| Select Interface Item Type to Process | Select_Interface_Item_Type | Varchar2(6) |
| Select Interface File Format to Process | Select_Interface_File_Format | Varchar2(13) |
| Select Report to Print | Select_Report_To_Process | Varchar2(16) |
| Select Month FOR Which to Generate Estimated Accruals | Generation_Month | Varchar2(9) |
| Select Month ON Which to Base Estimated Accruals | Basis_Month | Varchar2(9) |
| Printer | Printer | Varchar2(15) |
| Copies | Copies | Number (3) |
| Print Time | Print_Time | Varchar2(20) |

Table 5.1 - Overview of the Processing Logic of the TEL202 Screen

#### *5.3.1.5.2 TEL202 Screen Processing Detailed Review*

The following sections describe the field descriptions and the processing logic for each field associated with the TEL202 screen.

| Field Property | Property Value |
|---|---|
| Screen Label | Selection |
| Purpose | This field captures processing selection criterion of the end-user. The user will be able to select whether they wish to process a batch of estimated accrual records or print the processing status report from a previous execution of the Telecommunications Interface one-month basis estimated accrual initiation process. |
| Field Name | Selection |
| Table Name | N/A |
| Displayed | Yes |
| Format | Only display number of selection criterion. |
| Required | Value must be selected prior to execution of the process. |
| System Generated | No |
| Primary Key | No |
| Unique | No |

| Field Property | Property Value |
|---|---|
| Default Value | N/A |
| Screen Display Format | |
| List Box | '1 - Process Estimated Accrual Data Batch'<br>'2 - Generate Report from Previous Execution' |
| Processing Logic | |
| Validation Check | See List Box |
| Validation Rules | See List Box, Format and Required |
| Tab Position | 1 |

| Field Property | Property Value |
|---|---|
| Screen Label | Email/Print |
| Purpose | This field captures the output report format selection criterion of the end-user. The user will be able to select whether they wish to print the report directly from the screen at the conclusion of processing or e-mail the report to their e-mail account. |
| Field Name | Report_Form |
| Table Name | N/A |
| Displayed | Yes |
| Format | Only 'E' or 'P' allowed. |
| Required | Value must be selected prior to execution of the process. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | 'E' |
| Screen Display Format | |
| List Box | 'E - E-mail report to account'<br>'P - Send report to printer' |
| Processing Logic | |
| Validation Check | See List Box |
| Validation Rules | See List Box, Format and Required |
| Tab Position | 2 |

| Field Property | Property Value |
|---|---|
| Screen Label | Select Interface File Type to Process |
| Purpose | This field captures all active interface file types that have been established for the end-user on the INT001 and TEL001 screens. The end user must select the interface file type to process. |
| Field Name | Select_Interface_File_Type |
| Table Name | N/A |
| Displayed | Yes |
| Format | N/A |
| Required | Value must be selected prior to execution of the process. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |

| Field Property | Property Value |
|---|---|
| Screen Display Format | |
| LOV | Return all values for Interface_Type with an Active_Status = 'Y' from the Interface_Control table on screen INT001 where the Emp_No of the end-user has been established in the Emp_No field with an Active_Status ' 'Y' from the Interface_User_Detail table on screen INT001 and File_ID = 'INPUT' from the Interface_Dir_Detail table on the screen INT001.<br><br>Union<br><br>Return all values for Interface_File_Type with an Active_Status = 'Y' from the Tel_Maint_Control table on screen TEL001. |
| Processing Logic | |
| Validation Check | See LOV |
| Validation Rules | See LOV and Required |
| Tab Position | 3 |

| Field Property | Property Value |
|---|---|
| Screen Label | Select Interface Item Type to Process |
| Purpose | This field captures all active item types as entered on TEL001 for the selected interface file type and file format. The end user must select the item type to process. |
| Field Name | Select_Interface_Item_Type |
| Table Name | N/A |
| Displayed | Yes |
| Format | N/A |
| Required | Value must be selected prior to execution of the process. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Screen Display Format | |
| LOV | Return all values for Item_Type from the Tel_Maint_Control table where the global variable for the Select_Interfce_File_Type on the TEL203 screen is equal to the Interface_File_Type respectively and the Active_Status is equal to 'Y' as entered on the Tel_Maint_Control table on screen TEL001.<br><br>If only one record is returned in the LOV populate the Select_Interface_Item_Type with that value.<br><br>If more than one record is returned in the LOV, require the user to select a value. |
| Processing Logic | |
| Validation Check | See LOV |
| Validation Rules | See LOV and Required |
| Tab Position | 4 |

| Field Property | Property Value |
|---|---|
| Screen Label | Select Interface File Format to Process |

| Field Property | Property Value |
|---|---|
| Purpose | This field captures all active interface file formats entered on TEL001 for the selected interface file type. The end user must select the interface file format to process. |
| Field Name | Select_Interface_File_Format |
| Table Name | N/A |
| Displayed | Yes |
| Format | N/A |
| Required | Value must be selected prior to execution of the process. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Screen Display Format | |
| LOV | Return all values for File_Format from the Tel_Maint_Control table where the global variable for the Select_Interfce_File_Type and Select_Inteface_Item_Type on the TEL203 screen is equal to the Interface_File_Type and Item_Type respectively and the Active_Status is equal to 'Y' as entered on the Tel_Maint_Control table on screen TEL001.<br><br>If only one record is returned in the LOV populate the Select_Interface_File_Format with that value.<br><br>If more than one record is returned in the LOV, require the user to select a value. |
| Processing Logic | |
| Validation Check | See LOV |
| Validation Rules | See LOV and Required |
| Tab Position | 5 |

| Field Property | Property Value |
|---|---|
| Screen Label | Select Report to Print |
| Purpose | **If the end-user selects option 1 (Process Estimated Accrual Data Batch) in the Selection field this field will not be available.**<br><br>**If the end-user selects option 2 (Generation Previous Execution Report) in the Selection field this field captures all report names in the determined directory based upon the selected interface file type and selected interface file format setup on TEL001 and INT001. The end user must select the report to print.** |
| Field Name | **Select_Report_To_Process** |
| Table Name | **N/A** |
| Displayed | **Yes** |
| Format | **N/A** |
| Required | ▸ **No, if the end-user selects option 1 (Process Estimated Accrual Data Batch) in the Selection field.**<br>▸ **Yes, If the end-user selects option 2 (Generation Previous Execution Report) in the Selection field.** |
| System Generated | No |
| Primary Key | No |

| Field Property | Property Value |
|---|---|
| Unique | No |
| Default Value | N/A |
| Screen Display Format | |
| LOV | **If the end-user selects option 2 (Generation Previous Execution Report) in the Selection field return all report file names as established in Directory_Location for the File_ID = 'Report' from the Interface_Dir_Detail table on the screen INT001 where the Interface_File_Type and File_Format from the Interface_Control table on screen INT001 is equal to the selected interface file type and selected interface file format respectively.**<br><br>When executed report files will be sent to the Unix printer as established for the end-user User ID. |
| Processing Logic | |
| Validation Check | See LOV |
| Validation Rules | See LOV and Required |
| Tab Position | 5, if option 2 is selected. |

| Field Property | Property Value |
|---|---|
| Screen Label | Select Month *FOR* Which to Generate Estimated Accruals |
| Purpose | This field captures the month and the current fiscal year for which to generate estimated accrual records. The end user must select the generation month. |
| Field Name | Generation_Month |
| Table Name | N/A |
| Displayed | Yes |
| Format | Mon-YYYY |
| Required | ▸ **If the end-user selects option 1 (Process Estimated Accrual Data Batch)** in the Selection field a value must be selected prior to execution of the process.<br>▸ **If the end-user selects option 2 (Generation Previous Execution Report) in the Selection field** this field will not be available. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | Null |
| Screen Display Format | |
| List Box | The List Box displays a list of values of all available months plus the current fiscal year. Available months are November through September of the current fiscal year. |
| Processing Logic | |
| Validation Check | ▸ See List Box.<br>▸ Value selected must be within the current fiscal year based upon the system date. |
| Validation Rules | See List Box, Required and Format. |
| Tab Position | 6, if Select_Report_To_Process is not accessible. |

| Field Property | Property Value |
|---|---|
| Screen Label | Select Month *ON* Which to Base Estimated Accruals |

| Field Property | Property Value |
|---|---|
| Purpose | This field captures the month and the current fiscal year for which to base the estimated accrual record generation. The end user must select the basis month. |
| Field Name | Basis_Month |
| Table Name | N/A |
| Displayed | Yes |
| Format | Mon-YYYY |
| Required | ▸ **If the end-user selects option 1 (Process Estimated Accrual Data Batch)** in the Selection field a value must be selected prior to execution of the process.<br>▸ **If the end-user selects option 2 (Generation Previous Execution Report) in the Selection field** this field will not be available. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | Null |
| Screen Display Format | |
| List Box | The List Box displays a list of values of all available months plus the current fiscal year. Available months are October through August of the current fiscal year.<br><br>Basis_Month must be less than the Generation_Month. |
| Processing Logic | |
| Validation Check | ▸ See List Box.<br>▸ Value selected must be within the current fiscal year based upon the system date. |
| Validation Rules | See List Box, Required and Format. |
| Tab Position | 7, if Select_Report_To_Process is not accessible. |

| Field Property | Property Value |
|---|---|
| Screen Label | Printer |
| Purpose | This field captures the default UNIX printer as established for the end-user. |
| Field Name | Printer |
| Table Name | N/A |
| Displayed | Yes |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | Default UNIX printer of the end-user |
| Screen Display Format | |
| LOV | All available UNIX printers |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | This field is only available if the end-user select option ‘2' in the Selection field and option ‘P’ from the Report_Form field. |

| Field Property | Property Value |
|---|---|
| Tab Position | 7, if the end-user select option ‘2' in the Selection field and option ‘P’ from the Report_Form field. |

| Field Property | Property Value |
|---|---|
| Screen Label | Copies |
| Purpose | This field captures the number of copies that will be sent to the selected printer. |
| Field Name | Copies |
| Table Name | N/A |
| Displayed | Yes |
| Format | 999 |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | 1 |
| Screen Display Format | |
| Text Box | Number of copies to be printed. |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | ▸ Cannot be greater than 999.<br>▸ This field is only available if the end-user select option ‘2' in the Selection field and option ‘P’ from the Report_Form field. |
| Tab Position | 8, if the end-user select option ‘2' in the Selection field and option ‘P’ from the Report_Form field. |

| Field Property | Property Value |
|---|---|
| Screen Label | Print Time |
| Purpose | This field captures when the time of the current day when the print job will be executed. |
| Field Name | Print_Time |
| Table Name | N/A |
| Displayed | Yes |
| Format | DD-MON-YYYY |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | System Date |
| Screen Display Format | |
| Text Box | Desired time of the current day when the print job will be executed |
| Processing Logic | |
| Validation Check | Cannot be prior to the system time |
| Validation Rules | ▸ Must use military time (e.g 2:00 PM = 14:00)<br>▸ This field is only available if the end-user select option ‘2' in the Selection field and option ‘P’ from the Report_Form field. |

| Field Property | Property Value |
|---|---|
| Tab Position | 9, if the end-user select option ‘2' in the Selection field and option ‘P’ from the Report_Form field. |

Table 5.2 - Detailed Review of the Processing Logic of the TEL202 Screen

#### *5.3.1.6 Security*

The existing CAMS/CFS menu security and the CAMS/CFS database roles will be used for implementing the security on the new screens and the objects developed, respectively.

#### *5.3.1.7 Error Handling Messages*

The following table lists the main error and warning messages applicable to the TEL202 screen.

| Message No. | Type | Text |
|---|---|---|
| 1 | Error | Interface File Type must be entered. |
| 2 | Error | Desired month for the generation of estimated accruals must be entered. |
| 3 | Error | Desired month on which to base the generation of estimated accruals must be entered. |
| 4 | Error | Current report process is still running. Please try again later. |

Table 5.3 - Main Error and Warning Messages for the TEL202 Screen

#### *5.3.1.8 Output*

All data entered or selected on the TEL202 screen will be used as global variables through out the one-month basis estimated accrual generation processing. At the conclusion of processing the global variables will be captured in the Parameter table.

#### *5.3.1.9 Reports*

The TEL202 process will generate one report during the processing of the one-month basis estimated accrual records. The One-Month Basis Estimated Accrual Generation Status Report is discussed in detail in Section 5.3.6 (Generate Telecom One-Month Basis Estimated Accrual Generation Status Report). The report will be generated, e-mailed or printed and placed in the output directories as established on INT001 for the applicable Interface File Type at the conclusion of processing.

If the end-user elects to print a previously generated One-Month Basis Estimated Accrual Processing Status Report the report will be sent to the Unix printer of the end-user based upon the User ID.

#### *5.3.1.10 Requirements Met in the Previous Section*

The document table below lists the requirements met by the detailed design. The table references the Telecommunications Interface Services Requirements Version 5.2 for the requirement number, applicable page number and description of the requirement.

| Requirement Number | Page | Description |
|---|---|---|
| CP - 5 | 14 | The Telecommunications Interface will generate estimated accruals for TELOPS and GSA BAC system files. The Telecommunications Interface shall prompt the user for which month to generate accruals for as well as allow the user to specify on which month to base those accruals. |

Table 5.4 - Requirements Met in the Previous Section

### *5.3.2 Validate One-Month Basis Estimated Accrual Generation Unique Parameters*

The Tel_Monthly_Validate routine is designed to inform the end-user if the parameters entered on the TEL202 screen have or have not been entered during a previous execution of the one-month basis estimated accrual generation process. The validation routine will utilize a parameter history table that is associated with the TEL202 screen. The table will record the Interface File Type, Interface File Format, Interface Item Type, GL_End_Dates, User ID and Process Initiation Date (with time stamp) for which the estimated accruals were generated as entered on the TEL202 screen.

When the process is executed the underlying PL/SQL will access the parameter history table to determine if the Interface File Type, Interface File Format, Interface Item Type and GL End Date combination entered on the TEL202 screen have already been used during a previous execution of the one-month basis estimated accrual generation processing. If the criteria are unique an informational message will appear indicating that the criteria entered are unique and will confirm the end-users intent to continue processing.

If the criteria are not unique the end-user will receive an informational warning. The warning will indicate that the criteria entered have already been used during a previous execution of the one-month basis estimated accrual generation processing. The message will also include the date of the processing and the user name of the individual who executed the processing. The end-user will be prompted to confirm if they wish to continue processing. If multiple rows are encountered within the parameter table, for the same Interface File Type, Interface File Format, Interface Item Type and GL_End_Date combination, the error message will be generated based upon the most recent Modification_Date (with time stamp).

If the end-user chooses to discontinue processing no one-month basis estimated accrual records will be generated. The process will call the routine to generate the One-Month Basis Estimated Accrual Generation Status Report. The report will indicate that no estimated accrual records were generated. Details of the report and the generation process are described in detail in Section 5.3.6 (Generate Telecom One-Month Basis Estimated Accrual Generation Status Report).

#### *5.3.2.1 Input*

The following sections list all tables needed prior to the execution of the Tel_Monthly_Validate routine. The table below lists the database tables that will be accessed by the validation routine.

| Table Name | Screen | Usage | Record Requirement |
|---|---|---|---|
| Tel_Monthly_Validate_Parameter | TEL202 | Reference | History of TEL202 execution parameters |
| Parameter | N/A | Store Screen Values | N/A |

Table 5.5 - Tel_Monthly_Validate Routine Input Tables

#### *5.3.2.2 Processing Logic of the One-Month Basis Estimated Accrual Generation Validation Table*

##### *5.3.2.2.1 Tel_Monthly_Validate_Parameter Table Overview*

The document table below describes the parameter table associated with the Tel_Monthly_Validate routine.

| Field Name | Type and Size | Description |
|---|---|---|
| Interface_File_Type | Varchar2(4) | Interface File Type of previously executed process. |
| Interface_File_Format | Varchar2(13) | Interface File Format of previously executed process. |
| Inteface_Item_Type | Varchar2(6) | Interface Item Type of previously executed process. |
| Generation_Month | Date | GL_End_Date of previously executed process. |
| User_Name | Varchar2(30) | User name of the individual who last modified the invoice record in a financial system. |
| Modification_Date | Date | Date the invoice record was last modified in a financial system. |

Table 5.6 - Overview Processing Logic for the parameter table associated with the Tel_Monthly_Validate Routine (Tel_Monthly_Validate_Parameter)

### *5.3.2.3 Tel_Monthly_Validate_Parameter Table Detailed Review*

The document table below describes the processing logic for the parameter table associated with the Tel_Monthly_Validate routine.

| Column Property | Property Value |
|---|---|
| Purpose | The record that includes the values captured in this column will be checked against the Interface_File_Type value captured in the global variable for the Select_Interface_File_Type field on the TEL202 screen. Upon confirmation of the end-users intent to continue processing this field will capture the Interface_File_Type as entered on the TEL202 screen in a new record. |
| Field Name | Interface_File_Type |
| Table Name | Tel_Monthly_Validate_Parameter |
| Displayed | No |
| Format | N/A |
| Required | Yes upon confirmation of the end-users intent to continue processing. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | The record that includes the values captured in this column will be checked against the Interface_File_Format value captured in the global variable for the Select_Interface_File_Format field on the TEL202 screen. Upon confirmation of the end-users intent to continue processing this field will capture the Interface_File_Format as entered on the TEL202 screen in a new record. |
| Field Name | Interface_File_Format |
| Table Name | Tel_Monthly_Validate_Parameter |
| Displayed | No |
| Format | N/A |
| Required | Yes upon confirmation of the end-users intent to continue processing. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | The record that includes the values captured in this column will be checked against the Interface_Item_Type value captured in the global variable for the Select_Interface_Item_Type field on the TEL202 screen. Upon confirmation of the end-users intent to continue processing this field will capture the Interface_Item_Type as entered on the TEL202 screen in a new record. |
| Field Name | Interface_Item_Type |
| Table Name | Tel_Monthly_Validate_Parameter |
| Displayed | No |
| Format | N/A |
| Required | Yes upon confirmation of the end-users intent to continue processing. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | The record that includes the values captured in this column will be checked against the Generation_Month value captured in the global variable for the Generation_Month field on the TEL202 screen. Upon confirmation of the end-users intent to continue processing this field will capture the Generation_Month as entered on the TEL202 screen in a new record. |
| Field Name | Generation_Month |
| Table Name | Tel_Monthly_Validate_Parameter |
| Displayed | No |
| Format | N/A |
| Required | Yes upon confirmation of the end-users intent to continue processing. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the user name of the last individual to run the Telecommunications Interface. Upon confirmation of the end-users intent to continue processing this field will capture the Oracle Database User ID of the end-user in a new record. No validations will be made against this column. |
| Field Name | User_Name |
| Table Name | Tel_Monthly_Validate_Parameter |
| Displayed | N/A |
| Format | N/A |

| Column Property | Property Value |
|---|---|
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | Set as Oracle Database User ID |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the date the Telecommunications Interface was run. Upon confirmation of the end-users intent to continue processing this field will capture the processing date of the vendor invoice generation process in a new record. No validations will be made against this column. |
| Field Name | Modification_Date |
| Table Name | Tel_Monthly_Validate_Parameter |
| Displayed | N/A |
| Format | dd-mon-rrrr |
| Required | Yes |
| System Generated | Yes. Set as TRUNC (SYSDATE). |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

Table 5.7 - Detailed Review of the Processing Logic for the parameter table associated with the Tel_Monthly_Validate Routine (Tel_Monthly_Validate_Parameter)

#### *5.3.2.4 Output*

This sections list the database tables that will be affected by the actions of the Tel_Monthly_Validate routine. The table below lists the database tables where the Tel_Monthly_Validate routine is creating, updating or deleting data.

| Table Name | Insert | Update | Delete | Comments |
|---|---|---|---|---|
| Tel_Monthly_Validate_Parameter | Yes | No | No | Parameter table for the one-month bases estimated accrual generation process |

Table 5.8 - Output Tables Affected by the Tel_Monthly_Validate Routine

### *5.3.3 Determine One-Month Basis Estimated Accrual Records*

The Tel_Monthly_EA_Records routine is designed to generate one month of estimated accrual records based upon one month of invoice records. The routine will generate the estimated accrual records in a temporary table (header, control, item and account) upon which all additional one-month basis estimated accrual generation processing will be executed.

The Tel_Monthly_EA_Records routine will perform the following steps:

The Tel_Monthly_EA_Records routine will initially execute a query against the CAMS/CFS AP_Control and AP_Detail tables using the following criteria:

Invoice_Type = Derived from the Invoice_Type field on the TEL001 screen
Item_Type = Equal to the global variable captured on the TEL202 screen as Select_Interface_Item_Type
Invoice_Status = ‘PAID’, ‘OPEN’ or ‘INTRAN’
Approved_Flag = ‘Y’
Document_Source = ‘NONE’
Invoice_Date = All dates within the Basis_Month as entered on TEL202
Amount = Greater than zero
RI_Method = ‘Q’
APC_Flag = NULL

The Invoice_Type will be derived from the Invoice_Type field on the TEL001 screen from the maintenance record where the Interface_File_Type. Item_Type and File_Format is equal to the global variable captured on the TEL201 screen as Select_Interface_File_Type, Select_Interface_Item_Type and Select_Interface_File_Format respectively.

The results of the query will be captured in temporary tables that are identical to the EA_Control, EA_Item and EA_Account tables. The following routines will then be executed within the temporary tables. At the conclusion of the routines the temporary tables will be dropped.

If no invoice records are detected within the basis month for the criteria entered in the query a popup screen will appear informing the user that ‘No invoice records are present within the basis month selected.’. Processing will stop and the user will be returned to the TEL202 screen to enter different criteria for processing.

If the query has been successfully executed the Tel_Monthly_EA_Records routine will then attempt to identify identical invoice records within the temporary tables. Identical records will signify situations where multiple bills were processed for the same Reference_No within the same month. If

multiple records with the same Reference_No are identified the Telecommunications Interface will attempt to combine the records into one Estimated Accrual record with one or many line items.

The query will first attempt to identify identical records based upon the Reference_No. It will group the duplicate record's EA_Control and EA_Item values based upon the Reference_No only. The routine will use the first duplicate record's Tel_EA_Control and Tel_EA_Item values as the base for the additional records. The Unit_Price field on the Tel_EA_Item table will be the summation of the total dollar amount of the invoice records per Reference_No. The Accrued_Qty_Amount field on the Tel_EA_Item table will be defaulted to '1' for each unique Reference_No.

Then within the duplicate control and item combinations it will identify the ACCS string including Fiscal_Year and Bureau_Code and group those record's Tel_EA_Account values based upon the ACCS string.

The Amount field within each unique ACCS string on the Tel_EA_Account table will be calculated as follows:

$$\frac{\text{(Summed Amount field for each unique ACCS)}}{\text{(Summed Amount field for each unique Reference\_No)}} * \text{(Summed Amount field for each unique Reference\_No)} = \text{Amount (for each unique ACCS)}$$

The Qty_Accrued field within each unique ACCS string on the Tel_EA_Account table will be calculated as follows:

$$\frac{\text{Amount (for each unique ACCS)}}{\text{(Summed Amount field for each unique Reference\_No)}} = \text{Qty\_Accrued (for each unique ACCS)}$$

The result of the Qty_Accrued calculation will be subtracted from the Accrued_Qty_Amount field on the Tel_EA_Item table, which will always be equal to '1'. Any difference will be added to the largest Qty_Accrued value for the item number that is being processed. If multiple records are equal to the same 'largest Qty_Accrued value' within the ACCS string the difference will be added to the first occurrence. This step is necessary to ensure that the total value of the Qty_Accrued field for each line item on the Tel_EA_Account table and the Accrued_Qty_Amount field on the Tel_EA_Item table are always equal.

It is important to note that the Amount field, as generated by the Telecommunications Interface, will not be used by the Standard Interface for processing. The Standard Interface will multiply the Qty_Accrued for each ACCS string by the Unit_Price to determine the Amount of the ACCS string.

As a final step the routine will re-calculate the Unit_Price field on the Tel_EA_Item table to ensure that it's value is equal to the summation of the Amount fields on the Tel_EA_Account table. The following calculation will be performed:

| | | | |
|---|---|---|---|
| Qty_Accrued (for each unique ACCS) | * | Unit_Price (for the line item) | = Calculated Amount (for each unique ACCS) |

The Unit_Price field for the line item on the Tel_EA_Item table will be replaced with the summation of the calculated Amount fields.

The results of the query and routines will be maintained in the Tel_EA_Header, Tel_EA_Control and Tel_EA_Item and Tel_EA_Account tables of the Telecommunications Interface Estimated Accrual temporary tables. The table data mapping is discussed below.

#### *5.3.3.1 CAMS/CFS Invoice Table to Telecommunications Interface Estimated Accrual Tables Data Mapping*

The Tel_Monthly_EA_Records routine will return the following information for each record that meets the query criteria and place the data into the following database tables.

Complete descriptions of the Telecommunications Interface Estimated Accrual temporary tables is described in Section 5.3.3.3 (Processing Logic of the Telecommunications Interface Monthly Estimated Accrual Tables).

| Table Source | Table Source Column Name | Table Destination | Table Destination Column Name |
|---|---|---|---|
| AP_Control | Bureau_Code | Tel_EA_Control | Bureau_Code |
| AP_Control | Invoice_Type | Tel_EA_Control | Invoice_Type |
| AP_Control | Invoice_No | Tel_EA_Control | Invoice_No |
| AP_Control | Document_Source | Tel_EA_Control | Document_Source |
| AP_Control | PO_Type | Tel_EA_Control | PO_Type |
| AP_Control | PO_No | Tel_EA_Control | PO_No |
| AP_Control | Release_No | Tel_EA_Control | Release_No |
| AP_Control | Reference_No | Tel_EA_Control | Reference_No |
| AP_Control | Vendor_No | Tel_EA_Control | Vendor_No |
| AP_Control | Vendor_ID | Tel_EA_Control | Vendor_ID |
| AP_Detail | Item_No | Tel_EA_Item, Tel_EA_Account | Item_No |

| Table Source | Table Source Column Name | Table Destination | Table Destination Column Name |
|---|---|---|---|
| AP_Detail | Item_Type | Tel_EA_Item | Item_Type |
| AP_Detail | RI_Method | Tel_EA_Item | RI_Method |
| AP_Detail | Unit_Price | Tel_EA_Item | Unit_Price |
| AP_Detail | Line_No | Tel_EA_Account | Line_No |
| AP_Detail | QTY | Tel_EA_Account | Qty_Accrued |
| AP_Detail | Amount | Tel_EA_Account | Amount_Accrued |
| AP_Detail | Fiscal_Year | Tel_EA_Account | Fiscal_Year |
| AP_Detail | Bureau_Code | Tel_EA_Account | Bureau_Code |
| AP_Detail | Project_Code | Tel_EA_Account | Project_Code |
| AP_Detail | Task_Code | Tel_EA_Account | Task_Code |
| AP_Detail | Org1_Code | Tel_EA_Account | Org1_Code |
| AP_Detail | Org2_Code | Tel_EA_Account | Org2_Code |
| AP_Detail | Org3_Code | Tel_EA_Account | Org3_Code |
| AP_Detail | Org4_Code | Tel_EA_Account | Org4_Code |
| AP_Detail | Org5_Code | Tel_EA_Account | Org5_Code |
| AP_Detail | Org6_Code | Tel_EA_Account | Org6_Code |
| AP_Detail | Org7_Code | Tel_EA_Account | Org7_Code |
| AP_Detail | Object1_Code | Tel_EA_Account | Object1_Code |
| AP_Detail | Object2_Code | Tel_EA_Account | Object2_Code |
| AP_Detail | Object3_Code | Tel_EA_Account | Object3_Code |
| AP_Detail | Object4_Code | Tel_EA_Account | Object4_Code |
| AP_Detail | User_Define_ACCS | Tel_EA_Account | User_Define_ACCS |

Table 5.8 - Data Mapping of the Tel_Monthly_EA_Records Routine

#### *5.3.3.2 Input*

The following sections list all tables needed prior to the execution of the Tel_Monthly_EA_Records routine. The table below lists the database tables that will be accessed by the routine.

| Table Name | Screen | Usage | Record Requirement |
|---|---|---|---|
| AP_Control | PM003 | Reference | Invoice record details |
| AP_Detail | PM003 | Reference | Invoice record details |

| Table Name | Screen | Usage | Record Requirement |
|---|---|---|---|
| Parameter | N/A | Store Screen Values | N/A |

Table 5.9 - Tel_Monthly_EA_Records Routine Input Tables

### *5.3.3.3 Processing Logic of the Telecommunications Interface Monthly Estimated Accrual Tables*

The following tables describe the field descriptions of the Telecommunications Interface Estimated Accrual temporary tables. The header, control, item and account table structures are identical to the Standard Interface Estimate Accrual Transaction Intermediary tables that are associated with the CAMS/CFS PM050 screen. As a result no file reformatting routines will be executed against the estimated accrual record data batches.

The Telecommunications Interface and the Standard Interface do not utilize any of the columns contained in the CAMS/CFS EA_Descr table. As a result, that table will not be included in the descriptions below.

#### *5.3.3.3.1 Tel_EA_Header Table Overview*

The document table below describes the header table of the Telecommunications Interface Estimated Accrual temporary table associated with the Tel_Monthly_EA_Records Routine.

| Field Name | Type and Size | Description |
|---|---|---|
| Batch_No | Number | Sequence generated batch number of the estimated accrual data batch.<br>Primary Key of the table. |
| Interfacing_System | Varchar2(20) | The interfacing system from which the estimated accrual data batch is transferred to the Standard Interface. |
| Trans_Count | Number(6) | Number of transactions transferred in the estimated accrual data batch. |
| Office_Code | Varchar2(6) | Payment Office Code for which the estimated accrual data batch is transferred. |
| User_Name | Varchar2(30) | User name of the individual who last modified the estimated accrual records in a financial system. |
| Modification_Date | Date | Date the estimated accrual records were last modified in a financial system. |

| Field Name | Type and Size | Description |
|---|---|---|
| Device_Name | Varchar2(30) | Terminal code (ttye, Windows 98). |

Table 5.10 - Overview Processing Logic for the temporary table associated with the Tel_Monthly_EA_Records routine (Tel_EA_Header)

#### *5.3.3.3.2 Tel_EA_Header Table Detailed Review*

The document table below describes the processing logic for the columns of the header table (Tel_EA_Header) of the Telecommunications Interface Estimated Accrual temporary table that are affected by the Tel_Monthly_EA_Records routine.

| Column Property | Property Value |
|---|---|
| Purpose | Primary Key of the table. This field will capture a sequentially generated number that will be applied to all records within the estimated accrual data batch. Assigned by Tel_Monthly_EA_Records routine based upon the Standard Interface rules. |
| Field Name | Batch_No |
| Table Name | Tel_EA_Header |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | Yes |
| Unique | Yes |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required and Unique |
| Validation Rules | See Required and Unique |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the user name of the last individual to modify the estimated accrual records. Will be assigned during the Tel_Monthly_EA_Records routine. |
| Field Name | User_Name |
| Table Name | Tel_EA_Header |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |

| Column Property | Property Value |
|---|---|
| Validation Rules | Set as Oracle Database User ID |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the date of the last modification to the estimated accrual records. Will be assigned during the Tel_Monthly_EA_Records routine. |
| Field Name | Modification_Date |
| Table Name | Tel_EA_Header |
| Displayed | N/A |
| Format | dd-mon-rrrr |
| Required | Yes |
| System Generated | Yes. Set as TRUNC(SYSDATE). |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Format and Required |
| Validation Rules | See System Generated |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the terminal code through which the estimated accrual data batch was last modified. Will be assigned during the Tel_Monthly_EA_Records routine. |
| Field Name | Device_Name |
| Table Name | Tel_EA_Header |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes. Set as Userenv ('Terminal'). |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | See System Generated |

Table 5.11 - Detailed Review of the Processing Logic for the temporary table associated with the Tel_Monthly_EA_Records routine (Tel_EA_Header)

#### *5.3.3.3.3 Tel_EA_Control Table Overview*

The document table below describes the control table of the Telecommunications Interface Estimated Accrual temporary table associated with the Tel_Monthly_EA_Records Routine.

| Field Name | Type and Size | Description |
|---|---|---|
| Batch_No | Number | Sequence generated batch number of the estimated accrual data batch. Foreign Key referencing the header record. Part of the Primary Key of the table. |
| Trans_No | Number(8) | EA Transaction Number. Part of the primary key of the table. |
| Item_Count | Number(6) | Total number of item records associated with the control record. |
| GL_End_Date | Date | The GL_End_Date for the EA control record. |
| Invoice_Type | Varchar2(6) | Invoice Type of the shell invoice that will be created from the approved EA. |
| Invoice_No | Varchar2(20) | Invoice Number of the shell invoice that will be created from the approved EA. |
| Interfacing System | Varchar2(20) | The interfacing system which will interface the shell invoice from the EA. |
| Document_Source | Varchar2(6) | Document source of the EA. |
| PO_Type | Varchar2(6) | PO type against which the goods/services received are matched. |
| PO_No | Number(8) | PO number against which the goods/services received are matched. |
| Release_No | Number(3) | Release number against which the goods/services received are matched. |
| Reference_No | Varchar2(20) | Source reference of the EA. |
| Bureau_Code | Number(2) | Bureau code of the EA. |
| Vendor_No | Number(10) | Vendor number associated with the EA. |
| Vendor_ID | Number(6) | Vendor ID associated with the EA. |
| Approved_Flag | Varchar2(1) | Approval Flag status associated with the EA. |
| Notes | Varchar2(240) | Additional information about the EA. |
| User_Name | Varchar2(30) | User name of the individual who last modified the estimated accrual records in a financial system. |

| Field Name | Type and Size | Description |
|---|---|---|
| Modfiication_Date | Date | Date the estimated accrual records were last modified in a financial system. |
| Device_Name | Varchar2(30) | Terminal code (ttye, Windows 98). |

Table 5.12 - Overview Processing Logic for the temporary table associated with the Tel_Monthly_EA_Records routine (Tel_EA_Control).

#### *5.3.3.3.4 Tel_EA_Control Table Detailed Review*

The document table below describes the processing logic for the columns of the control table (Tel_EA_Control) of the Telecommunications Interface Estimated Accrual temporary table that are affected by the Tel_Monthly_EA_Records routine.

| Column Property | Property Value |
|---|---|
| Purpose | Foreign Key referencing the header record. Part of the primary key of the table. This field will capture a sequentially generated number that will be applied to all records within the estimated accrual data batch. Assigned by Tel_Monthly_EA_Records routine based upon the Standard Interface rules. |
| Field Name | Batch_No |
| Table Name | Tel_EA_Control |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | Yes |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | See Required |

| Column Property | Property Value |
|---|---|
| Purpose | Part of the primary key of the table. This field will capture a unique sequentially number that will be applied to the control and corresponding detail record(s) for each parent child relationship as established on the invoice record. Assigned by Tel_Monthly_EA_Records routine based upon the Standard Interface rules. |
| Field Name | Trans_No |
| Table Name | Tel_EA_Control |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | Yes |

| Column Property | Property Value |
|---|---|
| Unique | Yes within control record. |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required and Unique |
| Validation Rules | See Required and Unique |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the Bureau_Code of the estimated accrual record as recorded on the invoice record on AP_Control in the Bureau_Code column. |
| Field Name | Bureau_Code |
| Table Name | Tel_EA_Control |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the Invoice Type of the estimated accrual record as recorded on the invoice record on AP_Control in the Invoice_Type column. |
| Field Name | Invoice_Type |
| Table Name | Tel_EA_Control |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the Invoice Number of the estimated accrual record as recorded on the invoice record on AP_Control in the Invoice_No column. |
| Field Name | Invoice_No |
| Table Name | Tel_EA_Control |

| Column Property | Property Value |
|---|---|
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the Document Source of the estimated accrual record as recorded on the invoice record on AP_Control in the Document_Source column. |
| Field Name | Document_Source |
| Table Name | Tel_EA_Control |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the PO Type of the PO against which the goods and services are received for the estimated accrual record as recorded on the invoice record on AP_Control in the PO_Type column. |
| Field Name | PO_Type |
| Table Name | Tel_EA_Control |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |

| Column Property | Property Value |
|---|---|
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the PO Number of the PO against which the goods and services are received for the estimated accrual record as recorded on the invoice record on AP_Control in the PO_No column. |
| Field Name | PO_No |
| Table Name | Tel_EA_Control |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the Release Number of the PO against which the goods and services are received for the estimated accrual record as recorded on the invoice record on AP_Control in the Release_No column. |
| Field Name | Release_No |
| Table Name | Tel_EA_Control |
| Displayed | N/A |
| Format | N/A |
| Required | See Required |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the Source Reference information for the estimated accrual record as recorded on the invoice record on AP_Control in the Reference_No column. |
| Field Name | Reference_No |
| Table Name | Tel_EA_Control |
| Displayed | N/A |

| Column Property | Property Value |
|---|---|
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the Vendor Number information for the estimated accrual record as recorded on the invoice record on AP_Control in the Vendor_No column. |
| Field Name | Vendor_No |
| Table Name | Tel_EA_Control |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the Vendor Address Code information for the estimated accrual record as recorded on the invoice record on AP_Control in the Vendor_ID column. |
| Field Name | Vendor_ID |
| Table Name | Tel_EA_Control |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the user name of the last individual to modify the estimated accrual records. Will be assigned during the Tel_Monthly_EA_Records routine. |
| Field Name | User_Name |
| Table Name | Tel_EA_Control |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | Set as Oracle Database User ID |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the date of the last modification to the estimated accrual records. Will be assigned during the Tel_Monthly_EA_Records routine. |
| Field Name | Modification_Date |
| Table Name | Tel_EA_Control |
| Displayed | N/A |
| Format | dd-mon-rrrr |
| Required | Yes |
| System Generated | Yes. Set as TRUNC(SYSDATE). |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Format and Required |
| Validation Rules | See System Generated |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the terminal code through which the estimated accrual data batch was last modified. Will be assigned during the Tel_Monthly_EA_Records routine. |
| Field Name | Device_Name |
| Table Name | Tel_EA_Control |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes. Set as Userenv ('Terminal'). |
| Primary Key | No |
| Unique | No |

| Column Property | Property Value |
|---|---|
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | See System Generated |

Table 5.13 - Detailed Review of the Processing Logic for the temporary table associated with the Tel_Monthly_EA_Records routine (Tel_EA_Control)

#### *5.3.3.3.5 Tel_EA_Item Table Overview*

The document table below describes the item table of the Telecommunications Interface Estimated Accrual temporary table associated with the Tel_Monthly_EA_Records Routine.

| Field Name | Type and Size | Description |
|---|---|---|
| Batch_No | Number | Sequence generated batch number of the estimated accrual data batch. Foreign Key referencing the header record. Part of the Primary Key of the table. |
| Trans_No | Number(8) | EA Transaction Number. Part of the primary key of the table. Foreign key referencing the control record. |
| Item_No | Number(3) | EA Item Number. |
| Line_Item_Count | Number(6) | Number of MDL records for this item. |
| Accrued_QTY_Amount | Number(14,3) | Amount or quantity received for entire Item record. |
| Item_Type | Varchar2(6) | Item Type of the EA item record. |
| RI_Method | Varchar2(1) | RI Method of the EA item record. |
| Unit_Price | Number(12,4) | Unit Price of the EA item record. |
| Accrued_QTY_Amount | Number(14,3) | Amount or quantity received. |
| Commodity_Code | Varchar2(6) | Commodity Code of the EA item record. |
| Item_Descr | Varchar2(240) | Item Description of the EA item. |
| User_Name | Varchar2(30) | User name of the individual who last modified the estimated accrual records in a financial system. |
| Modfiication_Date | Date | Date the estimated accrual records were last modified in a financial system. |
| Device_Name | Varchar2(30) | Terminal code (ttye, Windows 98). |

Table 5.14 - Overview Processing Logic for the temporary table associated with the Tel_Monthly_EA_Records routine (Tel_EA_Item).

#### *5.3.3.3.6 Tel_EA_Item Table Detailed Review*

The document table below describes the processing logic for the columns of the item table (Tel_EA_Item) of the Telecommunications Interface Estimated Accrual temporary table that are affected by the Tel_Monthly_EA_Records routine.

| Column Property | Property Value |
|---|---|
| Purpose | Part of the primary key of the table. This field will capture a sequentially generated number that will be applied to all records within the estimated accrual data batch. Assigned by Tel_Monthly_EA_Records routine based upon the Standard Interface rules. |
| Field Name | Batch_No |
| Table Name | Tel_EA_Item |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | Yes |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | See Required |

| Column Property | Property Value |
|---|---|
| Purpose | Part of the primary key of the table. Foreign key referencing the control table. This field will capture a unique sequentially number that will be applied to the control and corresponding detail record(s) for each parent child relationship as established on the invoice record. Assigned by Tel_Monthly_EA_Records routine based upon the Standard Interface rules. |
| Field Name | Trans_No |
| Table Name | Tel_EA_Item |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | Yes |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | Part of the primary key of the table. This field captures the Item Number information for the estimated accrual record as recorded on the invoice record on AP_Detail in the Item_No column. |
| Field Name | Item_No |
| Table Name | Tel_EA_Item |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | Yes |
| Unique | Yes within item record. |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required and Unique |
| Validation Rules | See Required and Unique |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the Item Type information for the estimated accrual record as recorded on the invoice record on AP_Detail in the Item_Type column. |
| Field Name | Item_Type |
| Table Name | Tel_EA_Item |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the RI Method of the estimated accrual record as recorded on the invoice record on AP_Detail in the RI_Method column. |
| Field Name | RI_Method |
| Table Name | Tel_EA_Item |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |

| Column Property | Property Value |
|---|---|
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the Unit Price information for the estimated accrual record. |
| Field Name | Unit_Price |
| Table Name | Tel_EA_Item |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes. The Unit_Price field on the Tel_EA_Item table will be the summation of the total dollar amount of the invoice records per Reference_No. |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the quantity associated with the item record. This field will be defaulted to ‘1' as all records processed by the Telecommunications Interface will be quantity based. |
| Field Name | Accrued_Qty_Amount |
| Table Name | Tel_EA_Item |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes. |
| Primary Key | No |
| Unique | No |
| Default Value | ‘1' for each unique Reference_No. |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the user name of the last individual to modify the estimated accrual records. Will be assigned during the Tel_Monthly_EA_Records routine. |
| Field Name | User_Name |
| Table Name | Tel_EA_Item |

| Column Property | Property Value |
|---|---|
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | Set as Oracle Database User ID |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the date of the last modification to the estimated accrual records. Will be assigned during the Tel_Monthly_EA_Records routine. |
| Field Name | Modification_Date |
| Table Name | Tel_EA_Item |
| Displayed | N/A |
| Format | dd-mon-rrrr |
| Required | Yes |
| System Generated | Yes. Set as TRUNC(SYSDATE). |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Format and Required |
| Validation Rules | See System Generated |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the terminal code through which the estimated accrual data batch was last modified. Will be assigned during the Tel_Monthly_EA_Records routine. |
| Field Name | Device_Name |
| Table Name | Tel_EA_Item |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes. Set as Userenv ('Terminal'). |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |

| Column Property | Property Value |
|---|---|
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | See System Generated |

Table 5.15 - Detailed Review of the Processing Logic for the temporary table associated with the Tel_Monthly_EA_Records routine (Tel_EA_Item).

#### *5.3.3.3.7 Tel_EA_Account Table Overview*

The document table below describes the account table of the Telecommunications Interface Estimated Accrual temporary table associated with the Tel_Monthly_EA_Records Routine.

| Field Name | Type and Size | Description |
|---|---|---|
| Batch_No | Number | Sequence generated batch number of the estimated accrual data batch. Foreign Key referencing the header record. Part of the Primary Key of the table. |
| Trans_No | Number(8) | EA Transaction Number. Part of the primary key of the table. Foreign key referencing the control record. |
| Item_No | Number(3) | EA Item Number. |
| Line_No | Number(3) | MDL Number of the EA account record. |
| Qty_Accrued | Number(9,3) | Quantity accrued for the EA account record. |
| Amount | Number(13,2) | Amount accrued for the EA account record. |
| Fiscal_Year | Number(4) | Fiscal year of the EA account record. |
| Bureau_Code | Number(2) | Bureau Code of the EA account record. |
| Project_Code | Varchar2(7) | Project code of the EA account record. |
| Task_Code | Varchar2(3) | Task code of the EA account record. |
| Org1_Code | Varchar2(2) | Level 1 Organization Code of the EA account record. |
| Org2_Code | Varchar2(2) | Level 2 Organization Code of the EA account record. |
| Org3_Code | Varchar2(4) | Level 3 Organization Code of the EA account record. |
| Org4_Code | Number(2) | Level 4 Organization Code of the EA account record. |
| Org5_Code | Number(2) | Level 5 Organization Code of the EA account record. |
| Org6_Code | Number(2) | Level 6 Organization Code of the EA account record. |

| Field Name | Type and Size | Description |
|---|---|---|
| Org7_Code | Number(2) | Level 7 Organization Code of the EA account record. |
| Object1_Code | Number(2) | Level 1 Object Class of the EA account record. |
| Object2_Code | Number(2) | Level 2 Object Class of the EA account record. |
| Object3_Code | Number(2) | Level 3 Object Class of the EA account record. |
| Object4_Code | Number(2) | Level 4 Object Class of the EA account record. |
| User_Define_ACCS | Number(6) | User defined ACCS of the EA account record. |
| User_Name | Varchar2(30) | User name of the individual who last modified the estimated accrual records in a financial system. |
| Modification_Date | Date | Date the estimated accrual records were last modified in a financial system. |
| Device_Name | Varchar2(30) | Terminal code (ttye, Windows 98). |

Table 5.16 - Overview Processing Logic for the temporary table associated with the Tel_Monthly_EA_Records routine (Tel_EA_Account).

#### *5.3.3.3.8 Tel_EA_Account Table Detailed Review*

The document table below describes the processing logic for the columns of the account table (Tel_EA_Account) of the Telecommunications Interface Estimated Accrual temporary table that are affected by the Tel_Monthly_EA_Records routine.

| Column Property | Property Value |
|---|---|
| Purpose | Part of the primary key of the table. This field will capture a sequentially generated number that will be applied to all records within the estimated accrual data batch. Assigned by Tel_Monthly_EA_Records routine based upon the Standard Interface rules. |
| Field Name | Batch_No |
| Table Name | Tel_EA_Account |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | Yes |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | See Required |

| Column Property | Property Value |
|---|---|
| Purpose | Part of the primary key of the table. Foreign key referencing the control table. This field will capture a unique sequentially number that will be applied to the control and corresponding detail record(s) for each parent child relationship as established on the invoice record. Assigned by Tel_Monthly_EA_Records routine based upon the Standard Interface rules. |
| Field Name | Trans_No |
| Table Name | Tel_EA_Account |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | Yes |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | Part of the primary key of the table. Foreign key referencing the item table. This field captures the Item Number information for the estimated accrual record as recorded on the invoice record on AP_Detail in the Item_No column. |
| Field Name | Item_No |
| Table Name | Tel_EA_Account |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | Yes |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | See Required |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the MDL line number for the estimated accrual record as recorded on the invoice record on AP_Detail in the Line_No column. |
| Field Name | Line_No |
| Table Name | Tel_EA_Account |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |

| Column Property | Property Value |
|---|---|
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the calculated quantity of each MDL line that is associated with the item number for the estimated accrual record as recorded on the invoice record on AP_Detail in the QTY column. |
| Field Name | Qty_Accrued |
| Table Name | Tel_EA_Account |
| Displayed | N/A |
| Format | N/A |
| Required | Yes. See Section 5.3.3 (Determine One-Month Basis Estimated Accrual Records) for details related to the calculation of the Qty_Accrued field. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | No |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the calculated dollar amount of the MDL line that is associated with the item number for the estimated accrual record as recorded on the invoice record on AP_Detail in the Amount column. |
| Field Name | Amount |
| Table Name | Tel_EA_Account |
| Displayed | N/A |
| Format | N/A |
| Required | Yes. The Amount field on the Tel_EA_Account table will be the summation of the total dollar amount of each unique ACCS string per Reference_No. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the Fiscal Year portion of the ACCS for the estimated accrual record as recorded on the invoice record on AP_Detail in the Fiscal_Year column. |
| Field Name | Fiscal_Year |
| Table Name | Tel_EA_Account |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the Bureau Code portion of the ACCS for the estimated accrual record as recorded on the invoice record on AP_Detail in the Bureau_Code column. |
| Field Name | Bureau_Code |
| Table Name | Tel_EA_Account |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the Project Code portion of the ACCS for the estimated accrual record as recorded on the invoice record on AP_Detail in the Project_Code column. |
| Field Name | Project_Code |
| Table Name | Tel_EA_Account |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |

| Column Property | Property Value |
|---|---|
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the Task Code portion of the ACCS for the estimated accrual record as recorded on the invoice record on AP_Detail in the Task_Code column. |
| Field Name | Task_Code |
| Table Name | Tel_EA_Account |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the Level 1 Organization Code portion of the ACCS for the estimated accrual record as recorded on the invoice record on AP_Detail in the Org1_Code column. |
| Field Name | Org1_Code |
| Table Name | Tel_EA_Account |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the Level 2 Organization Code portion of the ACCS for the estimated accrual record as recorded on the invoice record on AP_Detail in the Org2_Code column. |
| Field Name | Org2_Code |
| Table Name | Tel_EA_Account |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the Level 3 Organization Code portion of the ACCS for the estimated accrual record as recorded on the invoice record on AP_Detail in the Org3_Code column. |
| Field Name | Org3_Code |
| Table Name | Tel_EA_Account |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the Level 4 Organization Code portion of the ACCS for the estimated accrual record as recorded on the invoice record on AP_Detail in the Org4_Code column. |
| Field Name | Org4_Code |
| Table Name | Tel_EA_Account |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |

| Column Property | Property Value |
|---|---|
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the Level 5 Organization Code portion of the ACCS for the estimated accrual record as recorded on the invoice record on AP_Detail in the Org5_Code column. |
| Field Name | Org5_Code |
| Table Name | Tel_EA_Account |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the Level 6 Organization Code portion of the ACCS for the estimated accrual record as recorded on the invoice record on AP_Detail in the Org6_Code column. |
| Field Name | Org6_Code |
| Table Name | Tel_EA_Account |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the Level 7 Organization Code portion of the ACCS for the estimated accrual record as recorded on the invoice record on AP_Detail in the Org7_Code column. |
| Field Name | Org7_Code |
| Table Name | Tel_EA_Account |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the Level 1 Object Class portion of the ACCS for the estimated accrual record as recorded on the invoice record on AP_Detail in the Object1_Code column. |
| Field Name | Object1_Code |
| Table Name | Tel_EA_Account |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the Level 2 Object Class portion of the ACCS for the estimated accrual record as recorded on the invoice record on AP_Detail in the Object2_Code column. |
| Field Name | Object2_Code |
| Table Name | Tel_EA_Account |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |

| Column Property | Property Value |
|---|---|
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the Level 3 Object Class portion of the ACCS for the estimated accrual record as recorded on the invoice record on AP_Detail in the Object3_Code column. |
| Field Name | Object3_Code |
| Table Name | Tel_EA_Account |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the Level 4 Object Class portion of the ACCS for the estimated accrual record as recorded on the invoice record on AP_Detail in the Object4_Code column. |
| Field Name | Object4_Code |
| Table Name | Tel_EA_Account |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the User Defined portion of the ACCS for the estimated accrual record as recorded on the invoice record on AP_Detail in the User_Define_ACCS column. |
| Field Name | User_Define_ACCS |
| Table Name | Tel_EA_Account |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the user name of the last individual to modify the estimated accrual records. Will be assigned during the Tel_Monthly_EA_Records routine. |
| Field Name | User_Name |
| Table Name | Tel_EA_Account |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | Set as Oracle Database User ID |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the date of the last modification to the estimated accrual records. Will be assigned during the Tel_Monthly_EA_Records routine. |
| Field Name | Modification_Date |
| Table Name | Tel_EA_Account |
| Displayed | N/A |
| Format | dd-mon-rrrr |
| Required | Yes |
| System Generated | Yes. Set as TRUNC(SYSDATE). |
| Primary Key | No |
| Unique | No |

| Column Property | Property Value |
|---|---|
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Format and Required |
| Validation Rules | See System Generated |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the terminal code through which the estimated accrual data batch was last modified. Will be assigned during the Tel_Monthly_EA_Records routine. |
| Field Name | Device_Name |
| Table Name | Tel_EA_Account |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes. Set as Userenv ('Terminal'). |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | See System Generated |

Table 5.17 - Detailed Review of the Processing Logic for the temporary table associated with the Tel_Monthly_EA_Records routine (Tel_EA_Account).

#### *5.3.3.4 Output*

This section lists the database tables that will be affected by the actions of the Tel_EA_Monthly_Records routine. The table below lists the database tables where the Tel_EA_Monthly_Records routine is creating, updating or deleting data.

| Table Name | Insert | Update | Delete | Comments |
|---|---|---|---|---|
| Tel_EA_Header | Yes | Yes | No | Temporary Transaction Table (estimated accrual records temporary table) |
| Tel_EA_Control | Yes | Yes | No | Temporary Transaction Table (estimated accrual records temporary table) |

| Table Name | Insert | Update | Delete | Comments |
|---|---|---|---|---|
| Tel_EA_Item | Yes | Yes | No | Temporary Transaction Table (estimated accrual records temporary table) |
| Tel_EA_Account | Yes | Yes | No | Temporary Transaction Table (estimated accrual records temporary table) |

Table 5.18 - Output Tables Affected by the Tel_EA_Monthly_Records Routine

### *5.3.4 Assign Default Estimated Accrual Values*

The Tel_Assign_Default_Monthly_EA_Values routine is designed to accomplish two objectives:

1. Populate default data values that will allow an approved telecommunications estimated accrual record to be successfully recorded in the EA_Control, EA_Item, EA_Descr and EA_Account tables associated with the PM050 screen.
2. Populate Telecommunications Interface specific data values that will ensure that all telecommunications estimated accrual records and the shell invoices that they create are easily distinguishable within CAMS/CFS.

#### *5.3.4.1 Input*

The following sections list all tables needed prior to the execution of the Tel_Assign_Default_Monthly_EA_Values routine. The table below lists the database tables that will be accessed by the routine.

| Table Name | Screen | Usage | Record Requirement |
|---|---|---|---|
| Tel_EA_Header | N/A | Temporary Transaction Table | Capture estimated accrual records on the estimated accrual records temporary table |
| Tel_EA_Control | N/A | Temporary Transaction Table | Capture estimated accrual records on the estimated accrual records temporary table |
| Tel_EA_Item | N/A | Temporary Transaction Table | Capture estimated accrual records on the estimated accrual records temporary table |
| Tel_EA_Account | N/A | Temporary Transaction Table | Capture estimated accrual records on the estimated accrual records temporary table |

Table 5.19 - Tel_Assign_Default_Monthly_EA_Values Routine Input Tables

### *5.3.4.2 Processing Logic of the Tel_Assign_Default_Monthly_EA_Values Routine*

#### *5.3.4.2.1 Tel_EA_Header Table Overview*

The document table below describes the header table of the estimated accrual records temporary table Tel_EA_Header.

Only the fields that are affected by the Tel_Assign_Default_Monthly_EA_Values routine are documented below.

| Field Name | Type and Size | Description |
|---|---|---|
| Interfacing_System | Varchar2(20) | The interfacing system from which the estimated accrual data batch is transferred to the Standard Interface. |
| Trans_Count | Number(6) | Number of transactions transferred in the estimated accrual data batch. |
| Office_Code | Varchar2(6) | Payment Office Code for which the estimated accrual data batch is transferred. |

Table 5.20 - Overview Processing Logic for the Estimated Accrual Records Temporary Table Header Table (Tel_EA_Header) During the Tel_Assign_Default_EA_Values Routine

#### *5.3.4.2.2 Tel_EA_Header Table Detailed Review*

The document table below describes the processing logic for the columns of the header table (Tel_EA_Header) of the Telecommunications Interface Estimated Accrual temporary table that are affected by the Tel_Assign_Default_Monthly_EA_Values routine.

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the interfacing system from which the estimated accrual data batch is transferred to the Standard Interface. This will be populated with the Interface File Type as established on the TEL001 screen by the Tel_Assign_Default_Monthly_EA_Values routine. |
| Field Name | Interfacing_System |
| Table Name | Tel_EA_Header |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |

| Column Property | Property Value |
|---|---|
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will calculate the total number of estimated accrual records processed by the Telecommunications Interface. This will be populated by the Tel_Assign_Default_EA_Values routine. |
| Field Name | Trans_Count |
| Table Name | Tel_EA_Header |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes. This field will be calculated based on the total number of estimated accrual records captured in the Tel_EA_Control table of the estimated accrual records temporary table. This field will capture the highest value in the Trans_No column on the Tel_EA_Control table within the estimated accrual data batch. |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the payment office code from which the estimated accrual data batch is transferred to the Standard Interface. This will be populated by the Tel_Assign_Default_EA_Values routine. |
| Field Name | Office_Code |
| Table Name | Tel_EA_Header |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes. The Office_Code will be derived from the Payment_Office_Code of the end-user identified by their database user name (DB_User_Name) from the Employee_Control table. |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

Table 5.21 - Detailed Review of the Processing Logic for the Estimated Accrual Records Temporary Table Header Table (Tel_EA_Header) During the Tel_Assign_Default_EA_Values Routine

#### *5.3.4.2.3 Tel_EA_Control Table Overview*

The document table below describes the control table of the estimated accrual records temporary table Tel_EA_Control.

Only the fields that are affected by the Tel_Assign_Default_Monthly_EA_Values routine are documented below.

| Field Name | Type and Size | Description |
|---|---|---|
| Item_Count | Number(6) | Total number of item records associated with the control record. |
| GL_End_Date | Date | The GL_End_Date for the EA control record. This field will not be populated by the Telecommunications Interface, but will be derived by the Standard Interface. |
| Interfacing_System | Varchar2(20) | The interfacing system which will interface the shell invoice from the EA. |
| Reference_No | Varchar2(20) | Source reference number of the EA. |
| Approved_Flag | Varchar2(1) | Approval Flag status associated with the EA. |
| Notes | Varchar2(240) | Additional information about the EA. This field will not be populated by the Telecommunications Interface. |

Table 5.22 - Overview Processing Logic for the Estimated Accrual Records Temporary Table Control Table (Tel_EA_Control) During the Tel_Assign_Default_EA_Values Routine

#### *5.3.4.2.4 Tel_EA_Control Table Detailed Review*

The document table below describes the processing logic for the columns of the control table (Tel_EA_Control) of the Telecommunications Interface Estimated Accrual temporary table that are affected by the Tel_Assign_Default_Monthly_EA_Values routine.

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the total number of item records that are associated with the control record. This will be calculated during the Tel_Assign_Default_EA_Values routine. |
| Field Name | Item_Count |
| Table Name | Tel_EA_Control |

| Column Property | Property Value |
|---|---|
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes. This field will generate a sequential number that will be increase by '1' for every unique item record, unique Item_No on the Tel_EA_Item table, that has a corresponding Trans_No or the Tel_EA_Control and Tel_EA_Item tables within the same estimated accrual data batch. |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the general ledger end date of the line item. This will *NOT* be populated by the Tel_Assign_Default_EA_Values routine. This value will be derived by the Standard Interface. |
| Field Name | GL_End_Date |
| Table Name | Tel_EA_Control |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the interfacing system which will interface the shell invoice from the EA. This will be populated with the Interface File Type as established on the TEL001 screen by the Tel_Assign_Default_Monthly_EA_Values routine. |
| Field Name | Interfacing_System |
| Table Name | Tel_EA_Control |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |

| Column Property | Property Value |
|---|---|
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field captures the Source Reference Number of the estimated accrual record as recorded on the invoice record on AP_Control in the Reference_No column during the Tel_Monthly_EA_Records routine.<br><br>During the Tel_Assign_Default_Monthly_EA_Values routine the Month and Year of the value captured in the global variable for the Generation_Month (GL_End_Date) as entered on the TEL202 screen will be added to the end of the Reference_No field.<br><br>For any data element that is greater than 15 characters, the characters greater than 15 will be overwritten by the Generation Month and Fiscal Year. |
| Field Name | Reference_No |
| Table Name | Tel_EA_Control |
| Displayed | N/A |
| Format | 999999999MONYY |
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | See Format |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the approval flag for the estimated accrual record. This will be populated with 'Y' by the Tel_Assign_Default_EA_Values routine. |
| Field Name | Approved_Flag |
| Table Name | Tel_EA_Control |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

Table 5.23 - Detailed Review of the Processing Logic for the Estimated Accrual Records Temporary Table Control Table (Tel_EA_Control) During the Tel_Assign_Default_EA_Values Routine

#### *5.3.4.2.5 Tel_EA_Item Table Overview*

The document table below describes the item table of the estimated accrual records temporary table Tel_EA_Item.

Only the fields that are affected by the Tel_Assign_Default_Monthly_EA_Values routine are documented below.

| Field Name | Type and Size | Description |
|---|---|---|
| Line_Item_Count | Number(6) | Number of MDL records for this item. |
| Commodity_Code | Varchar2(6) | Commodity Code of the EA item record. |
| Item_Descr | Varchar2(240) | Item Description of the EA item. |

Table 5.24 - Overview Processing Logic for the Estimated Accrual Records Temporary Table Item Table (Tel_EA_Item) During the Tel_Assign_Default_EA_Values Routine

#### *5.3.4.2.6 Tel_EA_Item Table Detailed Review*

The document table below describes the processing logic for the columns of the item table (Tel_EA_Item) of the Telecommunications Interface Estimated Accrual temporary table that are affected by the Tel_Assign_Default_Monthly_EA_Values routine.

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the total number of MDL records that are associated with the item record. This will be calculated during the Tel_Assign_Default_EA_Values routine. |
| Field Name | Line_Item_Count |
| Table Name | Tel_EA_Item |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes. This field will generate a sequential number that will be increase by '1' for every unique MDL record, unique Line_No on the Tel_EA_Account table, that has a corresponding Item_No or the Tel_EA_Item and Tel_EA_Account tables within the same estimated accrual transaction number (Trans_No) and data batch (Batch_No). |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the commodity code associated with the item record. This will be populated with 'MISC' by the Tel_Assign_Default_EA_Values routine. |
| Field Name | Commodity_Code |
| Table Name | Tel_EA_Item |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the description associated with the item record. This will *NOT* be populated by the Tel_Assign_Default_EA_Values routine. |
| Field Name | Item_Descr |
| Table Name | Tel_EA_Item |
| Displayed | N/A |
| Format | N/A |
| Required | No |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | N/A |

Table 5.25 - Detailed Review of the Processing Logic for the Estimated Accrual Records Temporary Table Item Table (Tel_EA_Item) During the Tel_Assign_Default_EA_Values Routine

#### *5.3.4.2.7 Tel_EA_Account Table Overview*

All columns within the Tel_EA_Account table will be populated by the Tel_Monthly_EA_Records routine.

### *5.3.4.3 Output*

This section lists the database tables that will be affected by the actions of the Tel_Assign_Default_Monthly_EA_Values routine. The table below lists the database tables where the

Tel_Assign_Default_Monthly_EA_Values routine is creating, updating or deleting data.

| Table Name | Insert | Update | Delete | Comments |
|---|---|---|---|---|
| Tel_EA_Header | No | Yes | No | Temporary Transaction Table (estimated accrual records temporary table) |
| Tel_EA_Control | No | Yes | No | Temporary Transaction Table (estimated accrual records temporary table) |
| Tel_EA_Item | No | Yes | No | Temporary Transaction Table (estimated accrual records temporary table) |
| Tel_EA_Account | No | Yes | No | Temporary Transaction Table (estimated accrual records temporary table) |

Table 5.28 - Output Tables Affected by the Tel_Assign_Default_Monthly_EA_Values Routine

### *5.3.5 Generate Telecom One-Month Basis Estimated Accrual Output Table*

The Tel_Monthly_Output_Generate routine is the last routine to be executed by the Telecommunications Interface Estimated Accrual Generation Process against the records within the temporary table. It is designed to copy all data within the estimated accrual records temporary table that has been fully populated into an Oracle Intermediary table.

#### *5.3.5.1 Input*

The following sections list all tables needed prior to the execution of the Tel_Monthly_Output_Generate routine. The table below lists the database tables that will be accessed by the Tel_Monthly_Output_Generate routine.

| Table Name | Screen | Usage | Record Requirement |
|---|---|---|---|
| Interface_Control | INT001 | Reference | Active and valid item type |
| Interface_Dir_Detail | INT001 | Reference | Active and valid employee records |
| Interface_User_Detail | INT001 | Reference | Active and valid directory locations |
| Tel_Maint_Control | TEL001 | Base Table | Base table record of the maintenance control table |
| Tel_Maint_Vendor | TEL001 | Base Table | Base table record of the maintenance detail table |
| Tel_EA_Header | N/A | Temporary Transaction Table | Capture estimated accrual records on the estimated accrual records temporary table |
| Tel_EA_Control | N/A | Temporary Transaction Table | Capture estimated accrual records on the estimated accrual records temporary table |

| Table Name | Screen | Usage | Record Requirement |
|---|---|---|---|
| Tel_EA_Item | N/A | Temporary Transaction Table | Capture estimated accrual records on the estimated accrual records temporary table |
| Tel_EA_Account | N/A | Temporary Transaction Table | Capture estimated accrual records on the estimated accrual records temporary table |

Table 5.29 - Tel_Monthly_Output_Generate Routine Input Tables

#### *5.3.5.2 Processing Logic of the Telecom Monthly Estimated Accrual Output Table*

All fields within the four tables of the estimated accrual records temporary table will be affected by the Tel_Monthly_Output_Generate routine. Therefore, details of the processing logic will not be documented below.

#### *5.3.5.3 Output*

This section lists the database tables that will be affected by the actions of the Tel_Monthly_Output_Generate routine. The table below lists the database tables where the Tel_Monthly_Output_Generate routine is creating, updating or deleting data.

| Table Name | Insert | Update | Delete | Comments |
|---|---|---|---|---|
| MSI_E00_Header | Yes | Yes | No | Standard Interface Oracle Intermediary Tables to be used to transfer telecommunications estimated accrual records |
| MSI_E01_Control | Yes | Yes | No | Standard Interface Oracle Intermediary Tables to be used to transfer telecommunications estimated accrual records |
| MSI_E02_Item | Yes | Yes | No | Standard Interface Oracle Intermediary Tables to be used to transfer telecommunications estimated accrual records |
| MSI_E03_Account | Yes | Yes | No | Standard Interface Oracle Intermediary Tables to be used to transfer telecommunications estimated accrual records |

Table 5.30 - Output Tables Affected by the Tel_Monthly_Output_Generate Routine

### *5.3.6 Generate Telecom One-Month Basis Estimated Accrual Generation Status Report*

After the Tel_Monthly_Output_Generate routine is complete the Telecommunications Interface will call the Tel_Monthly_Generation_Status_Report routine. This routine will generate the One-Month Basis Estimated Accrual Generation Status Report (TEL202)

and write the report to the directory as specified on the INT001 screen. The One-Month Basis Estimated Accrual Generation Status Report will capture the total number of one-month basis estimated accrual records generated and the supporting details of the generated records. The purpose of the report is to provide end-users with a summary of the estimated accrual generation processing results.

At the conclusion of the routine the estimated accrual records temporary table will be deleted.

Depending upon the reporting selection entered on the TEL202 screen this report will be sent directly to a printer or e-mailed to the end-users e-mail account. Reports that are e-mailed will be designed to be imported into Microsoft Excel similar to the logic developed for QR101 reports.

#### *5.3.6.1 Input*

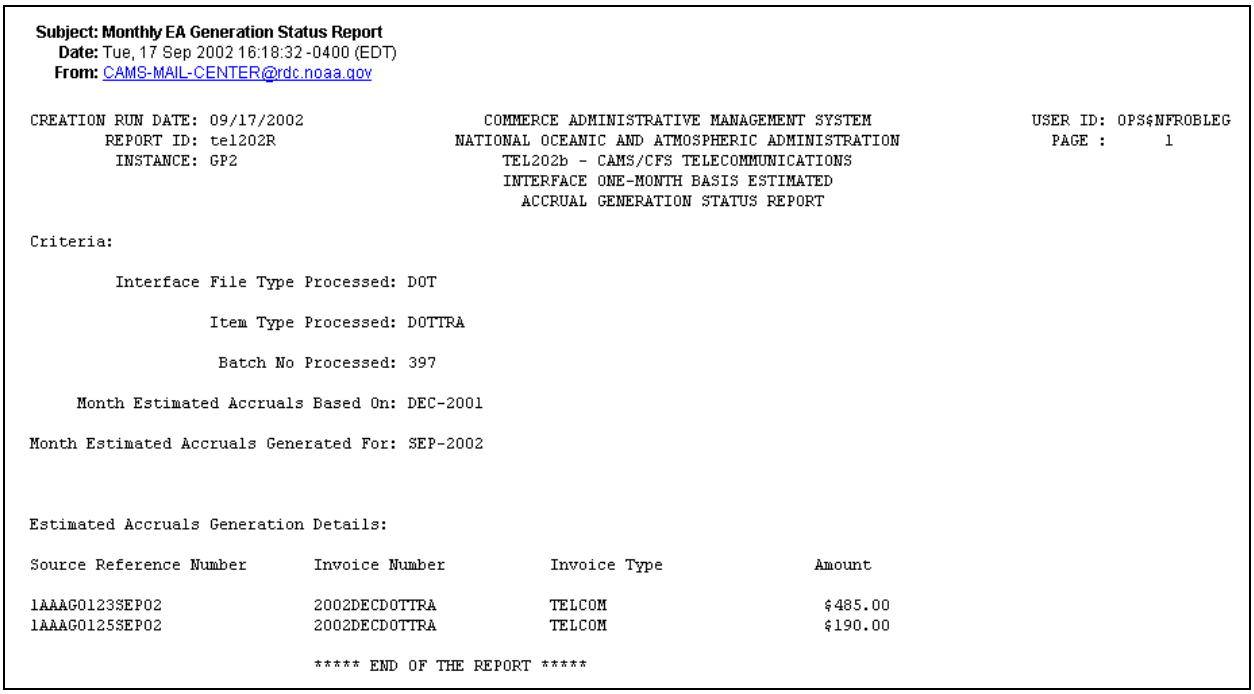
The following sections list all tables needed prior to the execution of the Tel_Monthly_Generation_Status_Report routine. The table below lists the database tables that will be accessed by the routine.

| Table Name | Screen | Usage | Record Requirement |
|---|---|---|---|
| Tel_EA_Header | N/A | Reference | Record values captured in the header table of the estimated accrual records temporary table |
| Tel_EA_Control | N/A | Reference | Record values captured in the header block of the estimated accrual records temporary table |
| Tel_EA_Item | N/A | Reference | Record values captured in the header table of the estimated accrual records temporary table |
| Tel_EA_Account | N/A | Reference | Record values captured in the header table of the estimated accrual records temporary table |
| Tel_Maint_Control | TEL001 | Reference | Interface File Types from active and valid header records |
| Tel_Maint_Vendor | TEL001 | Reference | Associated vendor information of selected interface file type |
| Interface_Control | INT001 | Reference | Active and valid item type |
| Interface_Dir_Detail | INT001 | Reference | Active and valid employee records |
| Interface_User_Detail | INT001 | Reference | Active and valid directory locations |
| Parameter | N/A | Store Screen Values | N/A |

Table 5.31 - Tel_Monthly_Generation_Status_Report Routine Input Tables

#### *5.3.6.2 Report Format*

The following is a screen shot of the TEL202 - Telecommunications Interface One-Month Basis Estimated Accrual Generation Status Report. The report will capture the processing results of the most recent one-month basis estimated accrual generation processing routines.



**Subject: Monthly EA Generation Status Report**
**Date:** Tue, 17 Sep 2002 16:18:32 -0400 (EDT)
**From:** CAMS-MAIL-CENTER@rdc.noaa.gov

```
CREATION RUN DATE: 09/17/2002          COMMERCE ADMINISTRATIVE MANAGEMENT SYSTEM          USER ID: OPS$NFROBLEG
        REPORT ID: tel202R          NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION          PAGE :      1
         INSTANCE: GP2                    TEL202b - CAMS/CFS TELECOMMUNICATIONS
                                          INTERFACE ONE-MONTH BASIS ESTIMATED
                                            ACCRUAL GENERATION STATUS REPORT

Criteria:

         Interface File Type Processed: DOT

                   Item Type Processed: DOTTRA

                    Batch No Processed: 397

     Month Estimated Accruals Based On: DEC-2001

Month Estimated Accruals Generated For: SEP-2002


Estimated Accruals Generation Details:

Source Reference Number       Invoice Number          Invoice Type              Amount

1AAAG0123SEP02                2002DECDOTTRA           TELCOM                     $485.00
1AAAG0125SEP02                2002DECDOTTRA           TELCOM                     $190.00

                              ***** END OF THE REPORT *****
```

Figure 11.0 - Layout of the TEL202 - One-Month Basis Estimated Accrual Generation Status Report

### *5.3.6.3 TEL202 - One-Month Basis Estimated Accrual Generation Status Report Processing Logic*

#### *5.3.6.3.1 TEL202 - One-Month Basis Estimated Accrual Generation Status Report Overview*

The document table below provides an overview of the processing logic associated with the columns on the TEL202 - One-Month Basis Estimated Accrual Generation Status Report.

| Report Label | Field Name | Type and Size |
|---|---|---|
| Creation Run Date | Date | Date |
| Report ID | Report_ID | Varchar2(10) |
| Instance | Instance | Varchar2(10) |
| User ID | User_ID | Varchar2(30) |
| Page | Page | Varchar2(3) |
| Interface File Type Processed: | Processed_Interface_File_Type | Varchar2(4) |
| Interface Item Type Processed: | Processed_Interface_Item_Type | Varchar2(6) |
| Month Estimated Accruals Based On: | Processed_Basis_Month | Varchar2(9) |
| Month Estimated Accruals Generated For: | Processed_Generation_Month | Varchar2(9) |
| Source Reference Number | Reference_No | Varchar2(20) |
| Invoice Number | Invoice_No | Varchar2(20) |
| Invoice type | Invoice_Type | Varchar2(6) |
| Amount | Amount | Number(12,4) |

Table 5.32 - Overview Processing Logic for the TEL202 - One-Month Basis Estimated Accrual Generation Status Report

#### *5.3.6.3.2 TEL202 - One-Month Basis Estimated Accrual Generation Status Report Detailed Review*

The document tables below describe in detail the processing logic associated with the columns shown in the TEL202 - One-Month Basis Estimated Accrual Generation Status Report.

| Field Property | Property Value |
|---|---|
| Report Label | Creation Run Date: |
| Purpose | This field captures the execution date of the report. This field is part of the header record of the report. |
| Field Name | Date |
| Table Name | N/A |
| Format | DD-MON-RRRR, Left Align |
| Calculation Logic | System generated based upon the system date. |

| Field Property | Property Value |
|---|---|
| Report Label | Report ID: |
| Purpose | This field captures the report ID within CAMS/CFS. This field is part of the header record of the report. |
| Field Name | Report_ID |
| Table Name | N/A |

| Field Property | Property Value |
|---|---|
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Instance: |
| Purpose | This field captures the instance in which the report was generated. This field is part of the header record of the report. |
| Field Name | Instance |
| Table Name | N/A |
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | User ID: |
| Purpose | This field captures the Oracle Database User ID of the end-user that initiated the original execution of the processing that generated the report. This field is part of the header record of the report. |
| Field Name | User_ID |
| Table Name | N/A |
| Format | Right Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Page: |
| Purpose | This field captures the page number of the report. This field is part of the header record of the report. |
| Field Name | Page |
| Table Name | N/A |
| Format | 999, Right Align |
| Calculation Logic | System generated based on the number of pages for the report. |

| Field Property | Property Value |
|---|---|
| Report Label | Interface_File_Type Processed: |
| Purpose | This field captures the Select_Interface_File_Type as selected on the TEL202 screen. |
| Field Name | Processed_Interface_File_Type |
| Table Name | N/A |
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Interface_Item_Type Processed: |
| Purpose | This field captures the Select_Interface_Item_Type as selected on the TEL202 screen. |
| Field Name | Processed_Interface_Item_Type |
| Table Name | N/A |

| Field Property | Property Value |
|---|---|
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Month Estimated Accruals Based On: |
| Purpose | This field captures the Basis_Month as selected on the TEL202 screen. |
| Field Name | Processed_Basis_Month |
| Table Name | N/A |
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Month Estimated Accruals Generated For: |
| Purpose | This field captures the Generation_Month as selected on the TEL202 screen. |
| Field Name | Processed_Generation_Month |
| Table Name | N/A |
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Source Reference Number |
| Purpose | This field captures the source reference number of each estimated accrual record as captured in the Reference_No column on the Tel_EA_Control table. |
| Field Name | Reference_No |
| Table Name | N/A |
| Format | Center Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Invoice No |
| Purpose | This field captures the invoice number of each estimated accrual record as captured in the Invoice_No column on the Tel_EA_Control table. |
| Field Name | Invoice_No |
| Table Name | N/A |
| Format | Center Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Invoice Type |
| Purpose | This field captures the invoice type of each estimated accrual record as captured in the Invoice_Type column on the Tel_EA_Control table. |
| Field Name | Invoice_Type |
| Table Name | N/A |
| Format | Center Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Amount |
| Purpose | This field captures the total dollar figure for each estimated accrual record. |
| Field Name | Amount |
| Table Name | N/A |
| Format | $999,999,999,999.9999, Center Align |
| Calculation Logic | Summation of all values captured in the Unit_Price column on the Tel_EA_Item table for every item record that has a corresponding Trans_No on Tel_EA_Control and Tel_EA_Item. |

Table 5.33 - Detailed Review of the Processing Logic for the TEL202 - One-Month Basis Estimated Accrual Generation Status Report

#### *5.3.6.4 Output*

This section lists the database tables that will be affected by the actions of the Tel_Monthly_Generation_Status_Report routine. The table below lists the database tables where the Tel_Monthly_Generation_Status_Report routine is creating, updating or deleting data.

| Table Name | Insert | Update | Delete | Comments |
|---|---|---|---|---|
| Tel_EA_Header | No | No | Yes | Capture estimated accrual records on the estimated accrual records temporary table |
| Tel_EA_Control | No | No | Yes | Capture estimated accrual records on the estimated accrual records temporary table |
| Tel_EA_Item | No | No | Yes | Capture estimated accrual records on the estimated accrual records temporary table |
| Tel_EA_Account | No | No | Yes | Capture estimated accrual records on the estimated accrual records temporary table |

Table 5.34 - Output Tables Affected by the Tel_Monthly_Generation_Status_Report Routine

### *5.3.7 Requirements Met in the Previous Section*

The document table below lists the requirements met by the detailed design. The table references the Telecommunications Interface Services Requirements Version 5.2 for the requirement number, applicable page and description of the requirement.

| Requirement Number | Page | Description |
|---|---|---|
| CP - 3 | 13 | For all estimated accruals, the Telecommunications Interface will post the records in CAMS/CFS on PM050. |
| CP - 16 | 18 | The Telecommunications Interface will pass accrual information to CAMS/CFS through the impending standard interface. |

Table 5.34 - Requirements Met in the Previous Section

## 5.4 Telecommunications Interface One-Month Basis Estimated Accrual Generation Processing Risks

Refer to the risks identified in Section 4.5.

## 5.5 Telecommunications Interface One-Month Basis Estimated Accrual Generation Processing Issues

Refer to the issues identified in Section 4.6.

# 6 Telecommunications Interface Yearly Average Estimated Accrual Generation

## 6.1 Purpose of Telecommunications Interface Yearly Average Estimated Accrual Generation

The Telecommunications Interface Yearly Average Estimated Accrual Generation process will allow users to generate a range of months of estimated accrual records based on a range of months of invoice records. The TEL203 (Telecommunications Interface Yearly Average Estimated Accrual Initiation Screen) will be used to execute the yearly average estimated accrual generation process. The end-users will have the ability to select the following criteria for the estimated accrual record generation processing:

1. Interface File Type for the generated estimated accrual records
2. Item Type for the generated estimated accrual records
3. Range of months for which to generate the estimated accrual records (Generation Month Range)
4. The earliest month on which to base the estimate accrual records (Basis Month Range)
5. The maximum number months, between the latest generation month and the earliest basis month, on which to base the estimate accrual records (Basis Month Range)

## 6.2 Process Flow of Telecommunications Interface Yearly Average Estimated Accrual Generation

The following diagrams illustrate the typical Telecommunications Interface Yearly Average Estimated Accrual Generation processes flow as outlined in the listing below:

1. Validate unique parameters
2. Determine estimated accrual records
3. Assign default estimated accrual values
4. Generate the telecommunications interface output table
5. Generate the yearly average estimated accrual generation processing report
6. Generate the closed or inactive invoice record report

### *6.2.1 Telecommunications Interface Yearly Average Estimated Accrual High Level Process Flow*

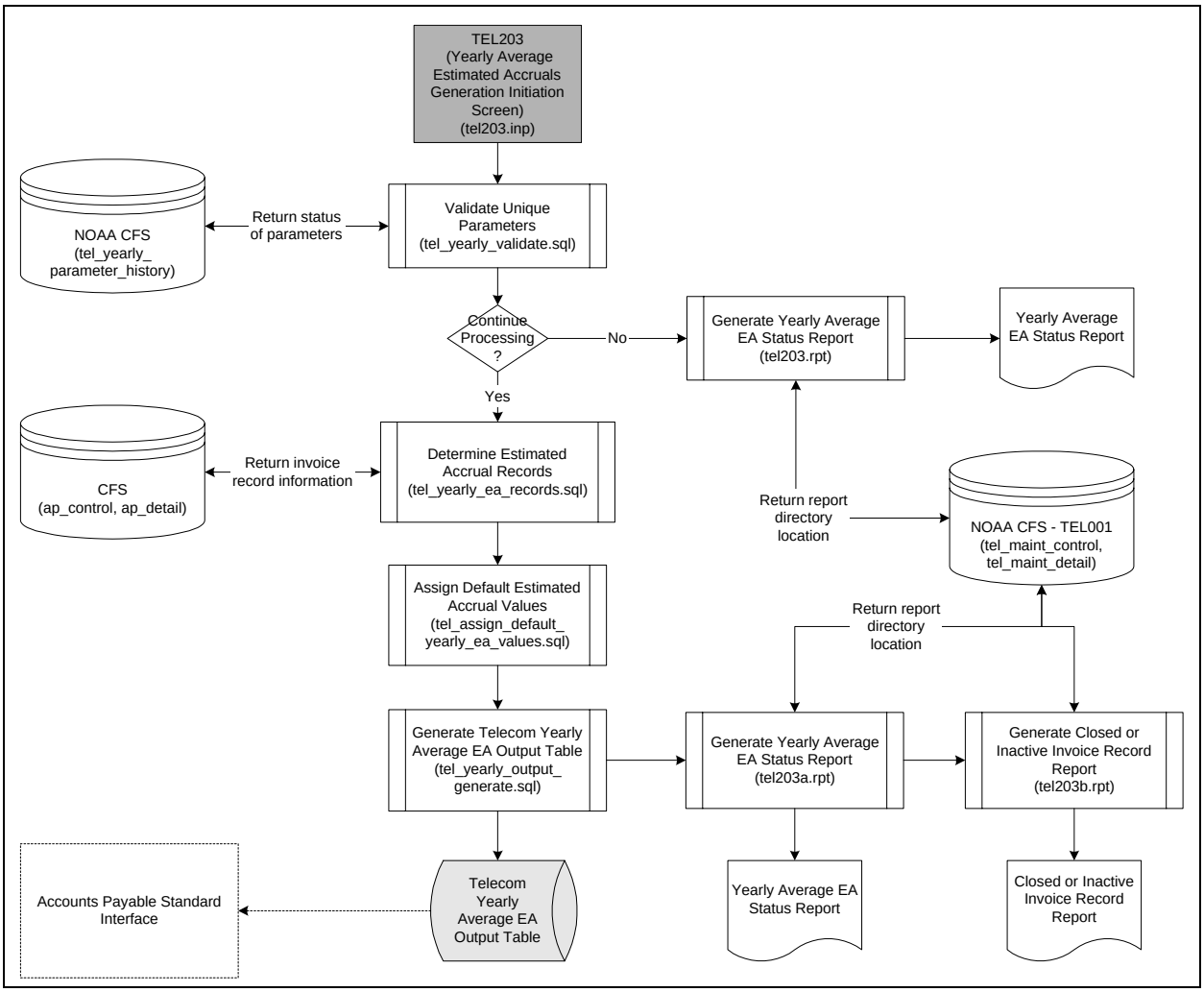



Figure 12.0 - Yearly Average Estimated Accrual Process Flow

## 6.3 Telecommunications Interface Yearly Average Estimated Accrual Generation Sub-Processing Logic

### *6.3.1 TEL203 - Yearly Average Estimated Accruals Generation Initiation Screen*

#### *6.3.1.1 Form Layout*

The TEL203 screen will be developed as a Character screen using Oracle Forms Version 3.0. The TEL203 screen will be used to execute the yearly average estimated accrual generation processing. The execution routine called by this screen, in turn will call all of the routines necessary to complete the processing of the yearly average estimated accrual records into Standard Interface ready estimated accrual records. The screen is comprised of one data block that will be used to enter the requested parameters that shape the processing.

##### *6.3.1.1.1 TEL203 - Telecommunications Interface Yearly Average Estimated Accrual Initiation Screen Layout*

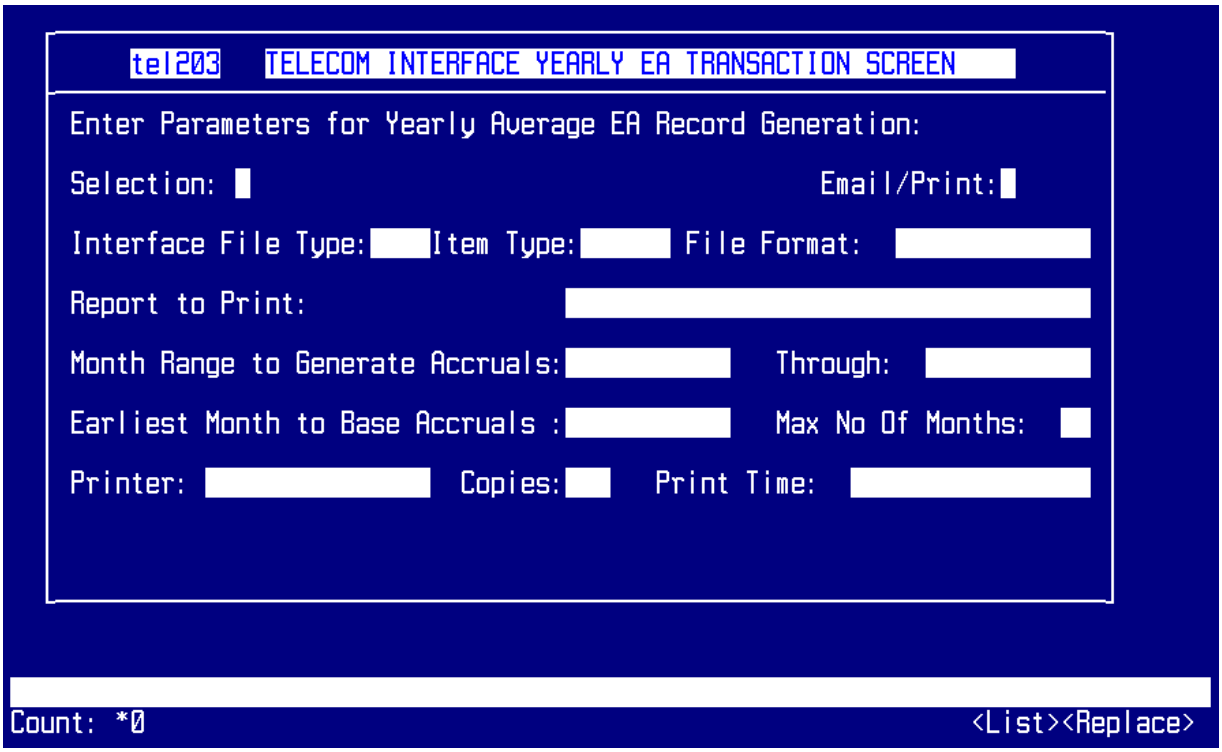



Figure 13.0 - TEL203 - Telecommunications Interface Yearly Average Estimated Accrual Initiation Screen Layout

#### *6.3.1.2 Operating Rules*

The following sections describe the operating rules applicable to the TEL203 screen. Operating Rules differ from business rules in that they are directly associated with a particular operation as opposed to business rules that are associated more generally with the whole application.

##### *6.3.1.2.1 Create a Record (Initiate Yearly Average Estimated Accrual Process)*

- Users are allowed to select the interface file type from a list of values.
- Users are allowed to select the interface item type from a list of values based upon the interface file type and interface file format selected.
- Users are allowed to select the interface file format from a list of values based upon the interface file type selected.
- Users are allowed to select the month range for which to generate estimated accrual records.
- Users are allowed to select the earliest month on which to base the estimated accrual records.
- Users are allowed to select the number of months on which to base the estimated accrual records.
- Users are able to e-mail or print current processing status reports.
- Users are able to e-mail or print previously generated Yearly Average Estimated Accrual Processing Status Report from the initiation screen.

##### *6.3.1.2.2 Modify a Record*

Users are not allowed to modify a record on this screen.

##### *6.3.1.2.3 Save a Record*

Users are not allowed to save a record on this screen.

##### *6.3.1.2.4 Delete a Record*

Users are not allowed to delete a record on this screen.

##### *6.3.1.2.5 Queries*

Users are not allowed to query on this screen.

#### *6.3.1.3 Business Rules*

The TEL203 screen will be used to generate a range of months of estimated accrual records for a specified line item type based upon a range of months of invoice records.

- Only authorized and established end-users will have access to this screen.
- This process can be executed as many times as needed by an authorized and established end-user.
- Zero and negative estimated accrual amounts will not be generated by the Telecommunications Interface.
- National Weather Service Estimated Accruals will not be generated for NWS long distance phone charges (Object Class 2339).
- This process can only be executed for months after October 2002, as historical data (FY 01) will not exist in CFS for the Invoice Type 'TELCOM'.
- Estimated accrual records can only be generated within the current fiscal year based upon invoice records recorded within the current fiscal year.
- Generation Start Date must be greater than the first month of the fiscal year (October), e.g. November will be the first available month to select from the list of values.
- Generation End Date must be greater than or equal to Generation Start Date.
- Generation End Date can not be greater than the last month of the fiscal year (September).
- Basis Month must be less than Generation Start Date.
- Basis Month must be less than last month of the fiscal year (September), e.g. August will be last available month to select from the list of values.
- Basis Range can be greater than the total number of months between the Generation Start Date and Basis Month.

#### *6.3.1.4 Input*

The following sections list all tables needed prior to executing the yearly average estimated accrual generation process from the TEL203 screen. The table below lists the database tables where the screen is obtaining the information.

| Table Name | Screen | Usage | Record Requirement |
|---|---|---|---|
| Tel_Maint_Control | TEL001 | LOV | Item Types from active and valid header records |
| Interface_Control | INT001 | Reference | Active and valid item type |
| Interface_Dir_Detail | INT001 | Reference | Active and valid employee records |
| Interface_User_Detail | INT001 | Reference | Active and valid directory locations |

| Table Name | Screen | Usage | Record Requirement |
|---|---|---|---|
| AP_Control | PM003 | Reference | Invoice record details |
| AP_Detail | PM003 | Reference | Invoice record details |
| Tel_Yearly_Validate_Parameter | TEL203 | Reference | History of TEL203 execution parameters |
| Parameter | N/A | Store Screen Values | N/A |

Table 6.0 - TEL203 (Telecommunications Interface Yearly Average Estimated Accrual Initiation Screen) Input Tables

### *6.3.1.5 Processing Logic for the TEL203 Screen*

#### *6.3.1.5.1 TEL203 Screen Processing Logic Overview*

The following document table lists all screen labels and applicable field names (non-base table) within the TEL203 screen. All values will be captured in the parameter table.

| Screen Label | Field Name | Type and Size |
|---|---|---|
| Selection | Selection | Varchar2(1) |
| Email/Print | Report_Form | Varchar2(1) |
| Select Interface File Type to Process | Select_Interface_File_Type | Varchar2(4) |
| Select Interface Item Type to Process | Select_Interface_Item_Type | Varchar2(6) |
| Select Interface File Format to Process | Select_Interface_File_Format | Varchar2(13) |
| Select Report to Print | Select_Report_To_Process | Varchar2(16) |
| Select Month Range FOR Which to Generate Estimated Accruals | Generation_Month_Start | Varchar2(9) |
| Through | Generation_Month_End | Varchar2(9) |
| Select the Earliest Month ON Which to Base Estimated Accruals | Basis_Month | Varchar2(9) |
| Select the Maximum Number of Months on Which to Base Estimated Accrual Generation (1-11) | Basis_Range | Number(2) |
| Printer | Printer | Varchar2(15) |
| Copies | Copies | Number (3) |
| Print Time | Print_Time | Varchar2(20) |

Table 6.1 - Overview of the Processing Logic of the TEL203 Screen

#### *6.3.1.5.2 TEL203 Screen Processing Logic Detailed Review*

The following sections describe the field descriptions and the processing logic for each field associated with the TEL203 screen.

| Field Property | Property Value |
|---|---|
| Screen Label | Selection |
| Purpose | This field captures processing selection criterion of the end-user. The user will be able to select whether they wish to process a batch of estimated accrual records or print the processing status report from a previous execution of the Telecommunications Interface yearly average estimated accrual initiation process. |
| Field Name | Selection |
| Table Name | N/A |
| Displayed | Yes |
| Format | Only display number of selection criterion. |
| Required | Value must be selected prior to execution of the process. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Screen Display Format | |
| List Box | '1 - Process Estimated Accrual Data Batch'<br>'2 - Generate Report from Previous Execution' |
| Processing Logic | |
| Validation Check | See List Box |
| Validation Rules | See List Box, Format and Required |
| Tab Position | 1 |

| Field Property | Property Value |
|---|---|
| Screen Label | Email/Print |
| Purpose | This field captures the output report format selection criterion of the end-user. The user will be able to select whether they wish to print the report directly from the screen at the conclusion of processing or e-mail the report to their e-mail account. |
| Field Name | Report_Form |
| Table Name | N/A |
| Displayed | Yes |
| Format | Only 'E' or 'P' allowed. |
| Required | Value must be selected prior to execution of the process. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | 'E' |
| Screen Display Format | |
| List Box | 'E - E-mail report to account'<br>'P - Send report to printer' |

| Field Property | Property Value |
|---|---|
| Processing Logic | |
| Validation Check | See List Box |
| Validation Rules | See List Box, Format and Required |
| Tab Position | 2 |

| Field Property | Property Value |
|---|---|
| Screen Label | Select Interface File Type to Process |
| Purpose | This field captures all active interface file types that have been established for the end-user on the INT001 and TEL001 screens. The end user must select the interface file type to process. |
| Field Name | Select_Interface_File_Type |
| Table Name | N/A |
| Displayed | Yes |
| Format | N/A |
| Required | Value must be selected prior to execution of the process. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Screen Display Format | |
| LOV | Return all values for Interface_Type with an Active_Status = 'Y' from the Interface_Control table on screen INT001 where the Emp_No of the end-user has been established in the Emp_No field with an Active_Status ' 'Y' from the Interface_User_Detail table on screen INT001 and File_ID = 'INPUT' from the Interface_Dir_Detail table on the screen INT001.<br><br>Union<br><br>Return all values for Interface_File_Type with an Active_Status = 'Y' from the Tel_Maint_Control table on screen TEL001. |
| Processing Logic | |
| Validation Check | See LOV |
| Validation Rules | See LOV and Required |
| Tab Position | 3 |

| Field Property | Property Value |
|---|---|
| Screen Label | Select Interface Item Type to Process |
| Purpose | This field captures all active item types as entered on TEL001 for the selected interface file type. The end user must select the item type to process. |
| Field Name | Select_Interface_Item_Type |
| Table Name | N/A |
| Displayed | Yes |
| Format | N/A |
| Required | Value must be selected prior to execution of the process. |
| System Generated | No |
| Primary Key | No |
| Unique | No |

| Field Property | Property Value |
|---|---|
| Default Value | N/A |
| Screen Display Format | |
| LOV | Return all values for Item_Type from the Tel_Maint_Control table where the global variable for the Select_Interfce_File_Type on the TEL203 screen is equal to the Interface_File_Type respectively and the Active_Status is equal to 'Y' as entered on the Tel_Maint_Control table on screen TEL001.<br><br>If only one record is returned in the LOV populate the Select_Interface_Item_Type with that value.<br><br>If more than one record is returned in the LOV, require the user to select a value. |
| Processing Logic | |
| Validation Check | See LOV |
| Validation Rules | See LOV and Required |
| Tab Position | 4 |

| Field Property | Property Value |
|---|---|
| Screen Label | Select Interface File Format to Process |
| Purpose | This field captures all active interface file formats entered on TEL001 for the selected interface file type and interface file format. The end user must select the interface file format to process. |
| Field Name | Select_Interface_File_Format |
| Table Name | N/A |
| Displayed | Yes |
| Format | N/A |
| Required | Value must be selected prior to execution of the process. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Screen Display Format | |
| LOV | Return all values for File_Format from the Tel_Maint_Control table where the global variable for the Select_Interfce_File_Type and Select_Inteface_Item_Type on the TEL203 screen is equal to the Interface_File_Type and Item_Type respectively and the Active_Status is equal to 'Y' as entered on the Tel_Maint_Control table on screen TEL001.<br><br>If only one record is returned in the LOV populate the Select_Interface_File_Format with that value.<br><br>If more than one record is returned in the LOV, require the user to select a value. |
| Processing Logic | |
| Validation Check | See LOV |
| Validation Rules | See LOV and Required |
| Tab Position | 5 |

| Field Property | Property Value |
|---|---|
| Screen Label | Select Report to Print |
| Purpose | If the end-user selects option 1 (Process Estimated Accrual Data Batch) in the Selection field this field will not be available.<br><br>If the end-user selects option 2 (Generation Previous Execution Report) in the Selection field this field captures all report names in the determined directory based upon the selected interface file type, selected interface file format and selected interface item type setup on TEL001 and INT001. The end user must select the report to print. |
| Field Name | Select_Report_To_Process |
| Table Name | N/A |
| Displayed | Yes |
| Format | N/A |
| Required | ▸ No, if the end-user selects option 1 (Process Estimated Accrual Data Batch) in the Selection field.<br>▸ Yes, If the end-user selects option 2 (Generation Previous Execution Report) in the Selection field. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Screen Display Format | |
| LOV | If the end-user selects option 2 (Generation Previous Execution Report) in the Selection field return all report file names as established in Directory_Location for the File ID = 'Report' from the Interface Dir Detail table on the screen INT001 where the Interface_File_Type, File_Format and Item_Type from the Interface Control table on screen INT001 is equal to the selected interface file type, selected interface file format and selected interface item type respectively.<br><br>When executed report files will be sent to the Unix printer as established for the end-user User ID. |
| Processing Logic | |
| Validation Check | See LOV |
| Validation Rules | See LOV and Required |
| Tab Position | 6, if option 2 is selected. |

| Field Property | Property Value |
|---|---|
| Screen Label | Select Month Range FOR Which to Generate Estimated Accruals |
| Purpose | This field captures the beginning month and the current fiscal year for which a range of estimated accrual records will be generated. The end user must select the generation month start. |
| Field Name | Generation_Month_Start |
| Table Name | N/A |
| Displayed | Yes |
| Format | Mon-YYYY |

| Field Property | Property Value |
|---|---|
| Required | ▸ **If the end-user selects option 1 (Process Estimated Accrual Data Batch)** in the Selection field a value must be selected prior to execution of the process.<br>▸ **If the end-user selects option 2 (Generation Previous Execution Report) in the Selection field** this field will not be available. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | Null |
| Screen Display Format | |
| List Box | The List Box displays a list of values of all available months plus the current fiscal year. Available months are November through September of the current fiscal year. |
| Processing Logic | |
| Validation Check | ▸ See List Box.<br>▸ Value selected must be within the current fiscal year based upon the system date. |
| Validation Rules | See List Box, Required and Format. |
| Tab Position | 6, if Select_Report_To_Process is not accessible. |

| Field Property | Property Value |
|---|---|
| Screen Label | Through |
| Purpose | This field captures the ending month and the current fiscal year for which a range of estimated accrual records will be generated. The end user must select the generation month end. |
| Field Name | Generation_Month_End |
| Table Name | N/A |
| Displayed | Yes |
| Format | Mon-YYYY |
| Required | ▸ **If the end-user selects option 1 (Process Estimated Accrual Data Batch)** in the Selection field a value must be selected prior to execution of the process.<br>▸ **If the end-user selects option 2 (Generation Previous Execution Report) in the Selection field** this field will not be available. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | Null |
| Screen Display Format | |
| List Box | The List Box displays a list of values of all available months plus the current fiscal year. Available months are November through September of the current fiscal year.<br><br>Generation_Month_End must be greater than the Generation_Month_Start. |
| Processing Logic | |
| Validation Check | ▸ See List Box<br>▸ Value selected must be within the current fiscal year based upon the system date. |

| Field Property | Property Value |
|---|---|
| Validation Rules | See List Box, Required and Format. |
| Tab Position | 7, if Select_Report_To_Process is not accessible. |

| Field Property | Property Value |
|---|---|
| Screen Label | Select the Earliest First Month ON Which to Base Estimated Accruals |
| Purpose | This field captures the beginning month and the current fiscal year for which a range of estimated accrual records will be based. The end user must select the basis month. The Telecommunications Interface will not query for invoice records to assist in the estimated accrual generation processing prior to the month specified in this field. The end user must select the basis month. |
| Field Name | Basis_Month |
| Table Name | N/A |
| Displayed | Yes |
| Format | Mon-YYYY |
| Required | ▸ **If the end-user selects option 1 (Process Estimated Accrual Data Batch)** in the Selection field a value must be selected prior to execution of the process.<br>▸ **If the end-user selects option 2 (Generation Previous Execution Report) in the Selection field** this field will not be available. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | Null |
| Screen Display Format | |
| List Box | The List Box displays a list of values of all available months plus the current fiscal year. Available months are October through August of the current fiscal year.<br><br>Basis_Month must be less than the Generation_Month_Start.<br><br>Basis_Month must be less than or equal to the GL_End_Date based upon the system date. |
| Processing Logic | |
| Validation Check | ▸ See List Box<br>▸ Value selected must be within the current fiscal year based upon the system date. |
| Validation Rules | See List Box, Required and Format. |
| Tab Position | 8, if Select_Report_To_Process is not accessible. |

| Field Property | Property Value |
|---|---|
| Screen Label | Select the Maximum Number of Months ON Which to Base Estimated Accruals (1-11) |

| Field Property | Property Value |
|---|---|
| Purpose | This field captures that maximum number of invoice records on which the end-user wants the estimated accrual records to be based.<br><br>This field will allow the end-user to select the maximum number of months between the Basis_Month and the Generation_Month_End, up to '11'.<br><br>Starting with the Generation Month_End and querying through the Basis_Month the Telecommunications Interface will attempt to identify a maximum of 'n' invoice records, where 'n' is less than or equal to the Generation_Month_End and greater or equal to the Basis_Month. |
| Field Name | Basis_Range |
| Table Name | N/A |
| Displayed | Yes |
| Format | N/A |
| Required | ▸ **If the end-user selects option 1 (Process Estimated Accrual Data Batch)** in the Selection field a value must be selected prior to execution of the process.<br>▸ **If the end-user selects option 2 (Generation Previous Execution Report) in the Selection field** this field will not be available. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | Null |
| Screen Display Format | |
| LOV | The Poplist displays a list of values range 1 (one) to 11 (eleven) based on calculation.<br><br>Cannot be greater than the total number of GL Periods between the Basis_Month and Generation_Month_End. |
| Processing Logic | |
| Validation Check | See LOV |
| Validation Rules | See LOV and Required |
| Tab Position | 9, if Select_Report_To_Process is not accessible. |

| Field Property | Property Value |
|---|---|
| Screen Label | Printer |
| Purpose | This field captures the default UNIX printer as established for the end-user. |
| Field Name | Printer |
| Table Name | N/A |
| Displayed | Yes |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | Default UNIX printer of the end-user |
| Screen Display Format | |
| LOV | All available UNIX printers |

| Field Property | Property Value |
|---|---|
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | This field is only available if the end-user select option ‘2' in the Selection field and option ‘P’ from the Report_Form field. |
| Tab Position | 7, if the end-user select option ‘2' in the Selection field and option ‘P’ from the Report_Form field. |

| Field Property | Property Value |
|---|---|
| Screen Label | Copies |
| Purpose | This field captures the number of copies that will be sent to the selected printer. |
| Field Name | Copies |
| Table Name | N/A |
| Displayed | Yes |
| Format | 999 |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | 1 |
| Screen Display Format | |
| Text Box | Number of copies to be printed. |
| Processing Logic | |
| Validation Check | N/A |
| Validation Rules | ▸ Cannot be greater than 999.<br>▸ This field is only available if the end-user select option ‘2' in the Selection field and option ‘P’ from the Report_Form field. |
| Tab Position | 8, if the end-user select option ‘2' in the Selection field and option ‘P’ from the Report_Form field. |

| Field Property | Property Value |
|---|---|
| Screen Label | Print Time |
| Purpose | This field captures when the time of the current day when the print job will be executed. |
| Field Name | Print_Time |
| Table Name | N/A |
| Displayed | Yes |
| Format | DD-MON-YYYY |
| Required | Yes |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | System Date |
| Screen Display Format | |
| Text Box | Desired time of the current day when the print job will be executed |
| Processing Logic | |

| Field Property | Property Value |
|---|---|
| Validation Check | Cannot be prior to the system time |
| Validation Rules | ▸ Must use military time (e.g 2:00 PM = 14:00)<br>▸ This field is only available if the end-user select option '2' in the Selection field and option 'P' from the Report_Form field. |
| Tab Position | 9, if the end-user select option '2' in the Selection field and option 'P' from the Report_Form field. |

Table 6.2 - Detailed Review of the Processing Logic of the TEL203 Screen

#### *6.3.1.6 Security*

The existing CAMS/CFS menu security and the CAMS/CFS database roles will be used for implementing the security on the new screens and the objects developed, respectively.

#### *6.3.1.7 Error Handling Messages*

The following table lists the main error and warning messages applicable to the TEL203 screen.

| Message No. | Type | Text |
|---|---|---|
| 1 | Error | Item Type must be entered. |
| 2 | Error | Desired month for the generation of estimated accruals must be entered. |
| 3 | Error | Desired month on which to base the generation of estimated accruals must be entered. |
| 4 | Error | A beginning month must be entered prior to the end month for the month range fields. |
| 5 | Error | A beginning and end month range must be entered prior to the basis month. |
| 6 | Error | A beginning and end month range must be entered prior to the basis month range. |
| 7 | Error | A basis month must be entered prior to the basis month range. |
| 8 | Error | Current report process is still running. Please try again later. |

Table 6.3 - Main Error and Warning Messages for the TEL203 Screen

#### *6.3.1.8 Output*

All data entered or selected on the TEL203 screen will be used as global variables through out the yearly average estimated accrual generation processing. At the conclusion of processing the global variables will be captured in the Parameter table.

#### *6.3.1.9 Reports*

The TEL203 process will generate two reports during the processing of the yearly average estimated accrual records. The Yearly Average Estimated Accrual Generation Status Report is discussed in detail in Section 6.3.6 (Generate Telecom Yearly Average Estimated Accrual Generation Status Report). The Closed or Inactive Invoice Record Report is discussed in detail in Section 6.3.7 (Generate Closed or Inactive Invoice Record Report). Both reports will be generated, e-mailed or printed and placed in the output directories as established on INT001 for the applicable Interface File Type at the conclusion of processing.

If the end-user elects to print a previously generated Yearly Average Estimated Accrual Processing Status Report or Closed or Inactive Invoice Record Report the reports will be sent to the Unix printer of the end-user based upon the User ID.

#### *6.3.1.10 Requirements Met in the Previous Section*

The document table below lists the requirements met by the detailed design. The table references the Telecommunications Interface Services Requirements Version 5.2 for the requirement number, applicable page number and description of the requirement.

| Requirement Number | Page | Description |
|---|---|---|
| CP - 4 | 13 | The Telecommunications Interface will generate estimated accruals for NWSAPP system files. The calculation includes detecting months where payments are missing and generating estimated accruals for those months based on past charges. |

Table 6.4 - Requirements Met in the Previous Section

### *6.3.2 Validate Yearly Average Estimated Accrual Generation Unique Parameters*

The Tel_Yearly_Validate routine is designed to inform the end-user if the parameters entered on the TEL203 screen have or have not been entered during a previous execution of the yearly average estimated accrual generation process. The validation routine will utilize a parameter history table that is associated with the TEL203 screen. The table will record the Interface File Type, Interface File Format, Interface Item Type, the beginning and ending general ledger end dates for the generation month range, User ID and Process Initiation Date (including time stamp) for which estimated accruals were generated as entered on the TEL203 screen.

When the process is executed the underlying PL/SQL will access the parameter history table to determine if the combination of Interface File Type, Interface File Format, Interface Item Type and any months within the generation month range entered on the TEL203 screen have already been

used during a previous execution of the yearly average estimated accrual generation processing. If the criteria are unique an informational message will appear indicating that the criteria entered are unique and will confirm the end-users intent to continue processing.

If the criteria are not unique the end-user will receive an informational warning. The warning will indicate that the criteria entered have already been used during a previous execution of the yearly basis estimated accrual generation processing. The message will also include the date of the processing and the user name of the individual who executed the processing. The end-user will be prompted to confirm if they wish to continue processing. If multiple rows are encountered within the parameter table, for the same Interface File Type, Interface File Format, Interface Item Type and GL End Date combination, the error message will be generated based upon the most recent Modification_Date (including time stamp).

If the end-user chooses to discontinue processing no yearly average estimated accrual records will be generated. The process will call the routine to generate the Yearly Average Estimated Accrual Generation Status Report. The report will indicate that no estimated accrual records were generated. Details of the report and the generation process are described in detail in Section 6.3.6 (Generate Telecom Yearly Average Estimated Accrual Generation Status Report).

#### *6.3.2.1 Input*

The following sections list all tables needed prior to the execution of the Tel_Yearly_Validate routine. The table below lists the database tables that will be accessed by the validation routine.

| Table Name | Screen | Usage | Record Requirement |
|---|---|---|---|
| Tel_Yearly_Validate_Parameter | TEL203 | Reference | History of TEL203 execution parameters |
| Parameter | N/A | Store Screen Values | N/A |

Table 6.5 - Tel_Yearly_Validate Routine Input Tables

#### *6.3.2.2 Processing Logic of the Yearly Average Estimated Accrual Generation Validation Table*

#### *6.3.2.2.1 Tel_Yearly_Validate_Parameter Table Overview*

The document table below describes the parameter table associated with the Tel_Yearly_Validate routine.

| Field Name | Type and Size | Description |
|---|---|---|
| Interface_File_Type | Varchar2(4) | Interface File Type of previously executed process. |
| Interface_File_Format | Varchar2(13) | Interface File Format of previously executed process. |
| Interface_Item_Type | Varchar2(6) | Interface Item Type of previously executed process. |
| Generation_Month_Start | Date | Beginning GL_End_Date of previously executed process. |
| Generation_Month_End | Date | Ending GL_End_Date of previously executed process. |
| User_Name | Varchar2(30) | User name of the individual who last modified the invoice record in a financial system. |
| Modification_Date | Date | Date the invoice record was last modified in a financial system. |

Table 6.6 - Overview Processing Logic for the parameter table associated with the Tel_Yearly_Validate Routine (Tel_Yearly_Validate_Parameter)

#### *6.3.2.2.2 Tel_Yearly_Validate_Parameter Table Detailed Review*

The document table below describes the processing logic for the parameter table associated with the Tel_Yearly_Validate routine.

| Column Property | Property Value |
|---|---|
| Purpose | The record that includes the values captured in this column will be checked against the Interface_File_Type value captured in the global variable for the Select_Interface_File_Type field on the TEL203 screen. Upon confirmation of the end-users intent to continue processing this field will capture the Interface_File_Type as entered on the TEL203 screen in a new record. |
| Field Name | Interface_File_Type |
| Table Name | Tel_Yearly_Validate_Parameter |
| Displayed | No |
| Format | N/A |
| Required | Yes upon confirmation of the end-users intent to continue processing. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | The record that includes the values captured in this column will be checked against the Interface_File_Format value captured in the global variable for the Select_Interface_File_Format field on the TEL203 screen. Upon confirmation of the end-users intent to continue processing this field will capture the Interface_File_Format as entered on the TEL203 screen in a new record. |
| Field Name | Interface_File_Format |
| Table Name | Tel_Yearly_Validate_Parameter |
| Displayed | No |
| Format | N/A |
| Required | Yes upon confirmation of the end-users intent to continue processing. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | The record that includes the values captured in this column will be checked against the Interface_Item_Type value captured in the global variable for the Select_Interface_Item_Type field on the TEL203 screen. Upon confirmation of the end-users intent to continue processing this field will capture the Interface_Item_Type as entered on the TEL203 screen in a new record. |
| Field Name | Interface_Item_Type |
| Table Name | Tel_Yearly_Validate_Parameter |
| Displayed | No |
| Format | N/A |
| Required | Yes upon confirmation of the end-users intent to continue processing. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | Each month with the generation month range as recorded on TEL203 will be verified against the month ranges that are between the Generation_Month_Start and Generation_Month_End on the Tel_Yearly_Validate_Parameter table. Upon confirmation of the end-users intent to continue processing this field will capture the Generation_Month_Start as entered on the TEL203 screen in a new record. |
| Field Name | Generation_Month_Start |
| Table Name | Tel_Yearly_Validate_Parameter |
| Displayed | No |

| Column Property | Property Value |
|---|---|
| Format | N/A |
| Required | Yes upon confirmation of the end-users intent to continue processing. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | Each month with the generation month range as recorded on TEL203 will be verified against the month ranges that are between the Generation_Month_Start and Generation_Month_End on the Tel_Yearly_Validate_Parameter table. Upon confirmation of the end-users intent to continue processing this field will capture the Generation_Month_End as entered on the TEL203 screen in a new record. |
| Field Name | Generation_Month_End |
| Table Name | Tel_Yearly_Validate_Parameter |
| Displayed | No |
| Format | N/A |
| Required | Yes upon confirmation of the end-users intent to continue processing. |
| System Generated | No |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the user name of the last individual to run the Telecommunications Interface. Upon confirmation of the end-users intent to continue processing this field will capture the Oracle Database User ID of the end-user in a new record. No validations will be made against this column. |
| Field Name | User_Name |
| Table Name | Tel_Yearly_Validate_Parameter |
| Displayed | N/A |
| Format | N/A |
| Required | Yes |
| System Generated | Yes |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |

| Column Property | Property Value |
|---|---|
| Validation Rules | Set as Oracle Database User ID |

| Column Property | Property Value |
|---|---|
| Purpose | This field will capture the date the Telecommunications Interface was run. Upon confirmation of the end-users intent to continue processing this field will capture the processing date of the vendor invoice generation process in a new record. No validations will be made against this column. |
| Field Name | Modification_Date |
| Table Name | Tel_Yearly_Validate_Parameter |
| Displayed | N/A |
| Format | dd-mon-rrrr |
| Required | Yes |
| System Generated | Yes. Set as TRUNC (SYSDATE). |
| Primary Key | No |
| Unique | No |
| Default Value | N/A |
| Processing Logic | |
| Validation Check | See Required |
| Validation Rules | N/A |

Table 6.7 - Detailed Review of the Processing Logic for the parameter table associated with the Tel_Yearly_Validate Routine (Tel_Yearly_Validate_Parameter).

#### *6.3.2.3 Output*

This sections list the database tables that will be affected by the actions of the Tel_Yearly_Validate routine. The table below lists the database tables where the Tel_Yearly_Validate routine is creating, updating or deleting data.

| Table Name | Insert | Update | Delete | Comments |
|---|---|---|---|---|
| Tel_Yearly_Validate_ Parameter | Yes | No | No | Parameter table for the yearly average estimated accrual generation process |

Table 6.8 - Output Tables Affected by the Tel_Yearly_Validate Routine

### *6.3.3 Determine Yearly Average Estimated Accruals Records*

The Tel_Yearly_EA_Records routine is designed to generate multiple months of estimated accruals records for a specified interface file type and interface item type for all months within the generation month range where an invoice record has not been recorded in CAMS/CFS.

The Tel_Yearly_EA_Records routine consists of several

The Tel_Yearly_EA_Records routine will initially execute a query against the CAMS/CFS AP_Control and AP_Detail tables using the following criteria:

Invoice_Type = Derived from the Invoice_Type field on the TEL001 screen
Item_Type = Equal to the global variable captured on the TEL203 screen as Select_Interface_Item_Type
Invoice_Status = ‘PAID’, ‘OPEN’ or ‘INTRAN’
Approved_Flag = ‘Y’
Document_Source = ‘NONE’
Invoice_Date = All dates within the basis month range
Amount = Greater than zero
RI_Method = ‘Q’
APC_Flag = NULL

The Invoice_Type will be derived from the Invoice_Type field on the TEL001 screen from the maintenance record where the Interface_File_Type. Item_Type and File_Format is equal to the global variable captured on the TEL203 screen as Select_Interface_File_Type, Select_Interface_Item_Type and Select_Interface_File_Format respectively.

The results of the query will be captured in temporary tables that are identical to the EA_Control, EA_Item and EA_Account tables.

If the Interfacing_System is equal to the Interface_File_Type for ‘NWS’ the routine will not return those records that have ‘23' in the Object1_Code and ‘39' in the Object2_Code fields . *This will ensure that estimated accruals are only generated for local phone charges.* For all situations where the Object1_Code and Object2_Code is equal to ‘2339' the Interfacing_File_Type is equal to ‘NWS’ no estimated accrual records will be generated.

In addition if the Interfacing System is equal to the Interface_File_Type for ‘NWS’ the routine will search the first two fields within the Item_Descr column on the AP_Detail table to identify the NWSAPP_Transaction_Code that was applied to the invoice record during the Telecommunications Interface invoice generation process. If the first two characters in the Item_Descr field contain a ‘20' or ‘23' the invoice records will not be loaded into the estimated accrual processing tables. The Reference_No, Invoice_No, Invoice_Date and Invoice_Amount from the AP_Control table for the invoice records will be captured within a second temporary table associated with the TEL203b - Closed or Inactive Invoice Records Report. Refer to Section 6.3.8 (Generate Closed or Inactive Invoice Record Report) for more details on the report process.

If the Interfacing System is equal to an Interface_File_Type other than that for ‘NWS’ the records will be loaded into the temporary Telecommunications Interface EA tables for processing.

If no invoice records are detected within the basis month range for the criteria entered in the query a popup screen will appear informing the user that ‘No invoice records are present within the basis month range selected.’. Processing will stop and the user will be returned to the TEL203 screen to enter different criteria for processing.

If the query has been successfully executed the Tel_Yearly_EA_Records routine will attempt to identify identical invoice records within the temporary tables. Identical records will signify situations where multiple bills were processed for the same Reference_No within the same month. If multiple records with the same Reference_No are identified the Telecommunications Interface will attempt to combine the records into one Estimated Accrual record with one or many line items. Each month will signify one occurrence of the Reference_No. This process will be repeated for each Reference_No for each month, starting with the month immediately preceding the generation start month, within the basis month range up to the maximum number of months as selected for the basis range. The routine will use the first duplicate record’s Tel_EA_Control and Tel_EA_Item values as the base for the additional records.

The Unit_Price field on the Tel_EA_Item table will be the summation of the total dollar amount of the invoice records per Reference_No for all months within the basis month range divided by the number of occurrences of that Reference_No. The Accrued_Qty_Amount field on the Tel_EA_Item table will be defaulted to ‘1' for each unique Reference_No.

Then within the duplicate control and item combinations it will identify the ACCS string including Fiscal_Year and Bureau_Code and group those record’s Tel_EA_Account values based upon the ACCS string.

The Amount field within each unique ACCS string on the Tel_EA_Account table will be calculated as follows:

$$\frac{\text{(Summed Amount field for each unique Reference\_No)}}{\text{(Number of occurrences for each unique Reference\_No)}} = \text{Monthly Average for each unique Reference\_No}$$

$$\frac{\text{(Summed Amount field for each unique ACCS)}}{\text{(Monthly Average for each unique Reference\_No)}} * \text{(Monthly Average for each unique Reference\_No)} = \text{Amount (for each unique ACCS)}$$

The Qty_Accrued field within each unique ACCS string on the Tel_EA_Account table will be calculated as follows:

$$\frac{\text{Amount (for each unique ACCS)}}{\text{(Monthly Average for each unique Reference\_No)}} = \text{Qty\_Accrued (for each unique ACCS)}$$

The result of the Qty_Accrued calculation will be subtracted from the Accrued_Qty_Amount field on the Tel_EA_Item table, which will always be equal to ‘1'. Any difference will be added to the largest Qty_Accrued value for the item number that is being processed. If multiple records are equal to the same ‘largest Qty_Accrued value’ within the ACCS string the difference will be added to the first occurrence. This step is necessary to ensure that the total value of the Qty_Accrued field for each line item on the Tel_EA_Account table and the Accrued_Qty_Amount field on the Tel_EA_Item table are always equal.

It is important to note that the Amount field, as generated by the Telecommunications Interface, will not be used by the Standard Interface for processing. The Standard Interface will multiply the Qty_Accrued for each ACCS string by the Unit_Price to determine the Amount of the ACCS string.

As a final step the routine will re-calculate the Unit_Price field on the Tel_EA_Item table to ensure that it’s value is equal to the summation of the Amount fields on the Tel_EA_Account table. The following calculation will be performed:

$$\text{Qty\_Accrued (for each unique ACCS)} * \text{Unit\_Price (for the line item)} = \text{Calculated Amount (for each unique ACCS)}$$

The Unit_Price field for the line item on the Tel_EA_Item table will be replaced with the summation of the calculated Amount fields.

The results of the query and routines will be maintained in the Tel_EA_Header, Tel_EA_Control and Tel_EA_Item and Tel_EA_Account tables of the Telecommunications Interface Estimated Accrual temporary tables. The table data mapping is discussed below.

As a result of this initial query and routine, one EA record will be generated for each unique reference number for each month within the generation month range. This EA record will be copied and applied to each month within the generation month range where an invoice for the unique reference number does not exist.

The table data mapping between the temporary invoice tables and the Telecommunications Interface Estimated Accrual temporary tables is discussed in Section 5.3.3.1 (CAMS/CFS Invoice Table to Telecommunications Interface Estimated Accrual Tables Data Mapping).

Complete descriptions of the Telecommunications Interface Estimated Accrual temporary tables is described in Section 5.3.3.3 (Processing Logic of the Telecommunications Interface Yearly Average Estimated Accrual Tables).

The Tel_Yearly_EA_Records routine will then execute a second query against the CAMS/CFS AP_Control and AP_Detail tables using the following criteria:

Invoice_Type = Derived from the Invoice_Type field on the TEL001 screen
Item_Type = Equal to the global variable captured on the TEL203 screen as Select_Interface_Item_Type
Invoice_Status = 'PAID', 'OPEN' or 'INTRAN'
Approved_Flag = 'Y'
Document_Source = NONE
Invoice_Date = All dates within the generation month range

The Invoice_Type will be derived from the Invoice_Type field on the TEL001 screen from the maintenance record where the Interface_File_Type. Item_Type and File_Format is equal to the global variable captured on the TEL203 screen as Select_Interface_File_Type, Select_Interface_Item_Type and Select_Interface_File_Format respectively.

The query will determine, for each Reference_No captured in the Estimated Accrual Generation Temporary Table, which months within the generation month range that do not have an invoice record recorded. The routine will generate an exact copy the original estimated accrual record for each month that does not have invoice record. It will insert the month and the fiscal year of the month where the record is to be applied. The routine will be repeated for all Reference_No's within the estimated accrual generation temporary table.

#### *6.3.3.1 Input*

Refer to Section 5.3.3.2 (Input) for the Tel_Yearly_EA_Records routine input tables descriptions.

#### *6.3.3.2 Processing Logic of the Telecommunications Interface Yearly Average Accrual Tables*

Refer to Section 5.3.3.3 (Processing Logic of the Telecommunications Interface Monthly Estimated Accrual Tables) and all sub-sections related to the Tel_Monthly_EA_Records routine for descriptions of the Telecommunications Interface Estimated Accrual temporary tables. The table structures described in Section 5.3.3.3 are directly applicable to the Telecommunications Interface Yearly Estimated Accrual Tables and the Tel_Yearly_EA_Records routine.

For details pertaining the correct month and fiscal year format to be applied to the Reference_No field please refer to Reference_No table in Section 5.3.3.3.4 (Tel_EA_Control Detailed Review).

It is important to note that the Tel_Yearly_EA_Records routine will not determine the month and year to be applied to the Reference_No field using the same logic as the Tel_Monthly_EA_Records routine. The month and the fiscal year of the month where the record is to be applied will determine the month and year values to be added to the Reference_No field.

#### *6.3.3.3 Output*

Refer to Section 5.3.3.3 (Output) for the Tel_Yearly_EA_Records routine output tables descriptions.

### *6.3.4 Assign Default Estimated Accrual Values*

The Tel_Assign_Default_Yearly_EA_Values routine is identical to the Tel_Assign_Default_Monthly_EA_Values routine as described in Section 5.3.4 (Assign Default Estimated Accrual Values) in all respects outside of one difference. Refer the Section 5.3.4 and all of its sub-sections for descriptions of the routine and the tables that are affected.

The two routines differ as follows:

The Tel_Assign_Default_Monthly_EA_Values routine populates the Reference_No field with the month and year of the GL_End_Date captured in the global variable for the Generation_Month from the TEL202 screen.

The Tel_Assign_Default_Yearly_EA_Values routine will not populate the Reference_No field with any additional data. The Tel_Yearly_EA_Records routine will populate the Reference_No field with the Source Reference Number and applicable month and year values as described in the Tel_Yearly_EA_Records routine.

### *6.3.5 Generate Telecom Yearly Average Estimated Accrual Output Table*

The Tel_Yearly_Output_Generate routine is identical to the Tel_Monthly_Output_Generate routine as described in Section 5.3.6 (Generate Telecom One-Month Basis Estimated Accrual Output Table). Refer the Section 5.3.6 and all of its sub-sections for descriptions of the routine and the tables that are affected.

### *6.3.6 Generate Telecom Yearly Average Estimated Accrual Generation Status Report*

After the Tel_Yearly_Output_Generate routine is complete the Telecommunications Interface will call the Tel_Yearly_Generation_Status_Report routine. This routine will generate the Yearly Average Estimated Accrual Generation Status Report (TEL203a) and write the report to the directory as specified on the INT001 screen. The Yearly Average Estimated Accrual Generation Status Report will capture the total number of yearly average estimated accrual records generated and the supporting details of the generated records. The purpose of the report is to provide end-users with a summary of the estimated accrual generation processing results.

At the conclusion of the routine the estimated accrual records temporary table will be deleted.

Depending upon the reporting selection entered on the TEL203 screen this report will be sent directly to a printer or e-mailed to the end-users e-mail account. Reports that are e-mailed will be designed to be imported into Microsoft Excel similar to the logic developed for QR101 reports.

#### *6.3.6.1 Input*

Refer to Section 5.3.5.2 (Input) for description of the tables needed prior to the execution of the Tel_Yearly_Generation_Status_Report routine.

### 6.3.6.2 *Report Format*

The following is the layout of the TEL203a - Telecommunications Interface Yearly Average Estimated Accrual Generation Status Report. The report will capture the processing results of the most recent yearly average estimated accrual generation processing routines.

**Subject: Yearly EA Generation Status Report**
**Date:** Tue, 17 Sep 2002 12:29:31 -0400 (EDT)
**From:** CAMS-MAIL-CENTER@rdc.noaa.gov

```
CREATION RUN DATE: 09/17/2002          COMMERCE ADMINISTRATIVE MANAGEMENT SYSTEM          USER ID: OPS$NFROBLEG
        REPORT ID: TEL203r          NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION          PAGE :      1
         INSTANCE: GP2                    TEL203a - CAMS/CFS TELECOMMUNICATIONS
                                           INTERFACE AVERAGE YARLY ESTIMATED
                                           ACCRUAL GENERATION STATUS REPORT

Criteria:

             Interface File Type Processed:   NWS

                       Item Type Processed:   MARINE

                        Batch No Processed:   372

       Estimated Accruals Generation Range:   01-SEP-2002     Through:       30-SEP-2002

Earliest Month Estimated Accruals Based On:   OCT-2001

              Maximum Number of Occurences:   1


Estimated Accruals Generation Details:

Source Reference Number       Invoice Number          Invoice Type                 Amount

8N6440444SEP02                507-644-0444            TELCOM                      $12.92
9N6440100SEP02                507-644-0101            TELCOM                      $17.85
9N6612996SEP02                703-661-2997            TELCOM                      $76.45
9N6763015SEP02                915-676-3016-139        TELCOM                      $37.51
9N6770145SEP02                215-677-0146-868        TELCOM                      $24.63
9N6770146SEP02                215-677-0147-869        TELCOM                       $5.16

                              ***** END OF THE REPORT *****
```

Figure 14.0 - Layout of the TEL203a - Yearly Average Estimated Accrual Generation Status Report

### 6.3.6.3 *TEL203a - Yearly Average Estimated Accrual Generation Status Report Processing Logic*

#### 6.3.6.3.1 *TEL203a - Yearly Average Estimated Accrual Generation Status Report Overview*

The document table below provides an overview of the processing logic associated with the columns on the TEL203a - Yearly Average Estimated Accrual Generation Status Report.

| Report Label | Field Name | Type and Size |
|---|---|---|
| Creation Run Date | Date | Date |
| Report ID | Report_ID | Varchar2(10) |
| Instance | Instance | Varchar2(10) |
| User ID | User_ID | Varchar2(30) |

| Report Label | Field Name | Type and Size |
|---|---|---|
| Page | Page | Varchar2(3) |
| Interface File Type Processed: | Processed_Interface_File_Type | Varchar2(4) |
| Interface Item Type Processed: | Processed_Interface_Item_Type | Varchar2(6) |
| Estimated Accruals Generation Range: | Processed_Month_Start | Varchar2(9) |
| Through: | Processed_Month_End | Varchar2(9) |
| Earliest Month Estimated Accruals Based On: | Earliest_Basis_Month | Varchar2(9) |
| Maximum Number of Months of Which to Base Estimated Accruals: | Max_Months | Number(2) |
| Total Number of Estimated Accrual Records Generated: | Total_Records | Number(6) |
| Source Reference Number | Reference_No | Varchar2(20) |
| Invoice Number | Invoice_No | Varchar2(20) |
| Invoice Date | Invoice_Date | Varchar2(7) |
| Amount | Amount | Number(6,2) |
| Sub Total | Sub_Total | Number(7,2) |
| Total | Total | Number(8,2) |

Table 6.9 - Overview Processing Logic for the TEL203a - Yearly Average Estimated Accrual Generation Status Report

#### *6.3.6.3.2 TEL203a - Yearly Average Estimated Accrual Generation Status Report Detailed Review*

The document tables below describe in detail the processing logic associated with the columns shown in the TEL203a - Yearly Average Estimated Accrual Generation Status Report.

| Field Property | Property Value |
|---|---|
| Report Label | Creation Run Date: |
| Purpose | This field captures the execution date of the report. This field is part of the header record of the report. |
| Field Name | Date |
| Table Name | N/A |
| Format | DD-MON-RRRR, Left Align |
| Calculation Logic | System generated based upon the system date. |

| Field Property | Property Value |
|---|---|
| Report Label | Report ID: |
| Purpose | This field captures the report ID within CAMS/CFS. This field is part of the header record of the report. |
| Field Name | Report_ID |
| Table Name | N/A |
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Instance: |
| Purpose | This field captures the instance in which the report was generated. This field is part of the header record of the report. |
| Field Name | Instance |
| Table Name | N/A |
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | User ID: |
| Purpose | This field captures the Oracle Database User ID of the end-user that initiated the original execution of the processing that generated the report. This field is part of the header record of the report. |
| Field Name | User_ID |
| Table Name | N/A |
| Format | Right Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Page: |
| Purpose | This field captures the page number of the report. This field is part of the header record of the report. |
| Field Name | Page |
| Table Name | N/A |
| Format | 999, Right Align |
| Calculation Logic | System generated based on the number of pages for the report. |

| Field Property | Property Value |
|---|---|
| Report Label | Interface_File_Type Processed: |
| Purpose | This field captures the Select_Interface_File_Type as selected on the TEL203 screen. |
| Field Name | Processed_Interface_File_Type |
| Table Name | N/A |
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Interface_Item_Type Processed: |
| Purpose | This field captures the Select_Interface_Item_Type as selected on the TEL203 screen. |
| Field Name | Processed_Interface_Item_Type |
| Table Name | N/A |
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Estimated Accruals Generation Range: |
| Purpose | This field captures the Generation_Month_Start as selected on the TEL203 screen. |
| Field Name | Processed_Month_Start |
| Table Name | N/A |
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Through: |
| Purpose | This field captures the Generation_Month_End as selected on the TEL203 screen. |
| Field Name | Processed_Month_End |
| Table Name | N/A |
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Earliest Month Estimated Accruals Based On: |
| Purpose | This field captures the Basis_Month as selected on the TEL203 screen. |
| Field Name | Earliest_Basis_Month |
| Table Name | N/A |
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Maximum Number of Months of Which to Base Estimated Accruals: |
| Purpose | This field captures the Basis_Range as selected on the TEL203 screen. |
| Field Name | Max_Month |
| Table Name | N/A |
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Total Number of Estimated Accrual Records Generated: |
| Purpose | This field captures the total number of estimated accrual record generated by the yearly average estimated accrual process. Equal to the Trans_Count column on the Tel_EA_Header table. |
| Field Name | Total_Records |
| Table Name | N/A |
| Format | 999,999, Center Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Source Reference Number |

| Field Property | Property Value |
|---|---|
| Purpose | This field captures the source reference number of each estimated accrual record as captured in the Reference_No column on the Tel_EA_Control table. |
| Field Name | Reference_No |
| Table Name | N/A |
| Format | Center Align |
| Calculation Logic | This field should only be populated with the first nine characters captured within the Reference_No field. |

| Field Property | Property Value |
|---|---|
| Report Label | Invoice No |
| Purpose | This field captures the invoice number of each estimated accrual record as captured in the Invoice_No column on the Tel_EA_Control table. |
| Field Name | Invoice_No |
| Table Name | N/A |
| Format | Center Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Invoice Date |
| Purpose | This field captures the month and year of each estimated accrual record as captured in the Reference_No column on the Tel_EA_Control table. |
| Field Name | Invoice_Date |
| Table Name | N/A |
| Format | Center Align |
| Calculation Logic | This field should only be populated with the character spaces 11 - 17 as captured within the Reference_No field. |

| Field Property | Property Value |
|---|---|
| Report Label | Amount |
| Purpose | This field captures the total dollar figure for each estimated accrual record. |
| Field Name | Amount |
| Table Name | N/A |
| Format | $999,999.99, Center Align |
| Calculation Logic | Summation of all values captured in the Unit_Price column on the Tel_EA_Item table for every item record that has a corresponding Trans_No on Tel_EA_Control and Tel_EA_Item. |

| Field Property | Property Value |
|---|---|
| Report Label | Sub-Total: |
| Purpose | This field will be generated after each set of estimated accrual records that have the same Reference_No. This field will capture the total of the estimated accrual record grouping. |
| Field Name | Sub_Total |
| Table Name | N/A |
| Format | $9,999,999.99, Center Align |

| Field Property | Property Value |
|---|---|
| Calculation Logic | Summation of all values captured in the Amount column on the TEL203a report that have the same Reference_No. |

| Field Property | Property Value |
|---|---|
| Report Label | Total: |
| Purpose | This field will capture the total amount of estimated accrual records generated by the yearly average estimated accrual processing. |
| Field Name | Total |
| Table Name | N/A |
| Format | $99,999,999.99, Center Align |
| Calculation Logic | Summation of all values captured in the Amount column on the TEL203a report. |

Table 6.10 - Detailed Review of the Processing Logic for the TEL203a - Yearly Average Estimated Accrual Generation Status Report

#### *6.3.6.4 Output*

Refer to Section 5.3.5.5 (Output) for description of the tables that will be affected by the Tel_Yearly_Generation_Status_Report routine.

### *6.3.7 Generate Closed or Inactive Invoice Record Report*

The Tel_Closed_Invoice_Record_Report routine is initiated during the Tel_Yearly_EA_Records routine but is not completed until after the Telecommunications Interface completes the Tel_Yearly_Generation_Status_Report routine.

The routine will generate the Closed or Inactive Invoice Record Status Report (TEL203b) and write the report to the directory as specified on the INT001 screen. The Closed or Inactive Invoice Record Status Report will capture the total number of invoice records that met the criteria entered on the TEL203 initiation screen but were deactivated during the year. The report will also supply the supporting details of the inactive records. The purpose of the report is to provide end-users with a summary of the number of the telecommunication accounts that have been deactivated prior to execution.

Depending upon the reporting selection entered on the TEL203 screen this report will be sent directly to a printer or e-mailed to the end-users e-mail account. Reports that are e-mailed will be designed to be imported into Microsoft Excel similar to the logic developed for QR101 reports.

#### *6.3.7.1 Input*

Refer to Section 5.3.1.4 (Input) for description of the tables needed prior to the execution of the Tel_Closed_Invoice_Record_Report routine.

### *6.3.7.2 Report Format*

The following is the layout of the TEL203b - Telecommunications Interface Closed or Inactive Invoice Record Report. The report will capture detail information about telecommunication accounts that have been deactivated prior to execution.

**Subject: Inactive Invoice Report**
**Date:** Tue, 17 Sep 2002 12:29:32 -0400 (EDT)
**From:** CAMS-MAIL-CENTER@rdc.noaa.gov

```
CREATION RUN DATE: 09/17/2002          COMMERCE ADMINISTRATIVE MANAGEMENT SYSTEM          USER ID: OPS$NFROBLEG
        REPORT ID: TEL203br          NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION          PAGE :      1
         INSTANCE: GP2                    TEL203B - CAMS/CFS TELECOMMUNICATIONS
                                               INTERFACE CLOSED OR INACTIVE
                                                     INVOICE REPORT

Criteria:

                  Interface File Type Processed:    NWS

                            Item Type Processed:    MARINE

                  Inactive Invoice Record Range:    01-SEP-2002     Through:       30-SEP-2002

Earliest Month Inactive Invoice Records Based On:   OCT-2001


Inactive Invoice Record Details:

Source Reference Number       Invoice Number          Invoice Date                  Amount

9N6770145                     215-677-0146-868        02-MAR-2002                  $24.63
9N6770146                     215-677-0147-869        02-APR-2002                   $5.16

                              ***** END OF THE REPORT *****
```

Figure 15.0 - Layout of the TEL203b - Closed or Inactive Invoice Records Report

### *6.3.7.3 TEL203b - Closed or Inactive Invoice Record Report Processing Logic*

#### *6.3.7.3.1 TEL203b - Closed or Inactive Invoice Record Report Overview*

The document table below provides an overview of the processing logic associated with the columns on the TEL203b - Closed or Inactive Invoice Records Report.

| Report Label | Field Name | Type and Size |
|---|---|---|
| Creation Run Date | Date | Date |
| Report ID | Report_ID | Varchar2(10) |
| Instance | Instance | Varchar2(10) |
| User ID | User_ID | Varchar2(30) |
| Page | Page | Varchar2(3) |
| Interface File Type Processed: | Processed_Interface_File_Type | Varchar2(4) |
| Interface Item Type Processed: | Processed_Interface_Item_Type | Varchar2(6) |
| Estimated Accruals Generation Range: | Processed_Month_Start | Varchar2(9) |
| Through: | Processed_Month_End | Varchar2(9) |
| Earliest Month Estimated Accruals Based On: | Earliest_Basis_Month | Varchar2(9) |

| Report Label | Field Name | Type and Size |
|---|---|---|
| Maximum Number of Months of Which to Base Estimated Accruals: | Max_Months | Number(2) |
| Total Number of Estimated Accrual Records Generated: | Total_Records | Number(6) |
| Source Reference Number | Reference_No | Varchar2(20) |
| Invoice Number | Invoice_No | Varchar2(20) |
| Invoice Date | Invoice_Date | Varchar2(7) |
| Amount | Amount | Number(6,2) |
| Execution Date | Date | Date |
| Page | Page | Varchar2(3) |

Table 6.11 - Detailed Review of the Processing Logic for the TEL203a - Yearly Average Estimated Accrual Generation Status Report

### *6.3.7.3.2 TEL203b - Closed or Inactive Invoice Record Report Detailed Review*

The document tables below describe in detail the processing logic associated with the columns shown in the TEL203b - Closed or Inactive Invoice Record Report.

| Field Property | Property Value |
|---|---|
| Report Label | Creation Run Date: |
| Purpose | This field captures the execution date of the report. This field is part of the header record of the report. |
| Field Name | Date |
| Table Name | N/A |
| Format | DD-MON-RRRR, Left Align |
| Calculation Logic | System generated based upon the system date. |

| Field Property | Property Value |
|---|---|
| Report Label | Report ID: |
| Purpose | This field captures the report ID within CAMS/CFS. This field is part of the header record of the report. |
| Field Name | Report_ID |
| Table Name | N/A |
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Instance: |
| Purpose | This field captures the instance in which the report was generated. This field is part of the header record of the report. |
| Field Name | Instance |
| Table Name | N/A |
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | User ID: |
| Purpose | This field captures the Oracle Database User ID of the end-user that initiated the original execution of the processing that generated the report. This field is part of the header record of the report. |
| Field Name | User_ID |
| Table Name | N/A |
| Format | Right Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Page: |
| Purpose | This field captures the page number of the report. This field is part of the header record of the report. |
| Field Name | Page |
| Table Name | N/A |
| Format | 999, Right Align |
| Calculation Logic | System generated based on the number of pages for the report. |

| Field Property | Property Value |
|---|---|
| Report Label | Interface_File_Type Processed: |
| Purpose | This field captures the Select_Interface_File_Type as selected on the TEL203 screen. |
| Field Name | Processed_Interface_File_Type |
| Table Name | N/A |
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Interface_Item_Type Processed: |
| Purpose | This field captures the Select_Interface_Item_Type as selected on the TEL203 screen. |
| Field Name | Processed_Interface_Item_Type |
| Table Name | N/A |
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Estimated Accruals Generation Range: |
| Purpose | This field captures the Generation_Month_Start as selected on the TEL203 screen. |
| Field Name | Processed_Month_Start |
| Table Name | N/A |
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Through: |
| Purpose | This field captures the Generation_Month_End as selected on the TEL203 screen. |
| Field Name | Processed_Month_End |
| Table Name | N/A |
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Earliest Month Estimated Accruals Based On: |
| Purpose | This field captures the Basis_Month as selected on the TEL203 screen. |
| Field Name | Earliest_Basis_Month |
| Table Name | N/A |
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Maximum Number of Months of Which to Base Estimated Accruals: |
| Purpose | This field captures the Basis_Range as selected on the TEL203 screen. |
| Field Name | Max_Month |
| Table Name | N/A |
| Format | Left Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Total Number of Closed or Inactive Invoice Records: |
| Purpose | This field captures the total number of closed or inactive invoice records that were kicked out of the Tel_Yearly_EA_Records routine. Equal to the total number of rows within the report. |
| Field Name | Total_Records |
| Table Name | N/A |
| Format | 999,999, Center Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Source Reference Number |
| Purpose | This field captures the source reference number for each invoice record. This field will be populated from the Reference_No column on the temporary AP_Control table. |
| Field Name | Reference_No |
| Table Name | N/A |
| Format | Center Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Invoice No |
| Purpose | This field captures the invoice number for each invoice record. This field will be populated from the Invoice_No column on the temporary AP_Control table. |
| Field Name | Invoice_No |
| Table Name | N/A |
| Format | Center Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Invoice Date |
| Purpose | This field captures the invoice date for each invoice record. This field will be populated from the Invoice_Date column on the temporary AP_Control table. |
| Field Name | Invoice_Date |
| Table Name | N/A |
| Format | Center Align |
| Calculation Logic | N/A |

| Field Property | Property Value |
|---|---|
| Report Label | Amount |
| Purpose | This field captures the total dollar figure for each invoice record. This field will be populated from the Invoice_Amount column on the temporary AP_Control table. |
| Field Name | Amount |
| Table Name | N/A |
| Format | $999,999.99, Center Align |
| Calculation Logic | N/A |

Table 6.12 - Detailed Review of the Processing Logic for the TEL203a - Yearly Average Estimated Accrual Generation Status Report

#### *6.3.7.4 Output*

Refer to Section 5.3.5.5 (Output) for description of the tables that will be affected by the Tel_Closed_Invoice_Record_Report routine.

### *6.3.8 Requirements Met in Previous Section*

The document table below lists the requirements met by the detailed design. The table references the Telecommunications Interface Services Requirements Version 5.2 for the requirement number, applicable page and description of the requirement.

| Requirement Number | Page | Description |
|---|---|---|
| CP - 3 | 13 | For all estimated accruals, the Telecommunications Interface will post the records in CAMS/CFS on PM050. |

| Requirement Number | Page | Description |
|---|---|---|
| CP - 16 | 18 | The Telecommunications Interface will pass accrual information to CAMS/CFS through the impending standard interface. |

Table 6.13 - Requirements Met in the Previous Section

## 6.4 Telecommunications Interface Yearly Average Estimated Accrual Generation Processing Risks

Refer to the risks identified in Section 4.5.

## 6.5 Telecommunications Interface Yearly Average Estimated Accrual Generation Processing Issues

Refer to the issues identified in Section 4.6.

# 7 Section 508 Software Accessibility Standards and Guidelines

All electronic forms developed for the Telecommunications Interface will be compliant with the accessibility standards at 36 CFR 1194, which implements Section 508 of the Rehabilitation Act of 1973.

The Telecommunications Interface design will rely upon the CAMS Support Center (CSC) guidelines as outlined in the 'CSC Programming Standards & Guidelines' document to ensure compliance with Section 508 standards. The Telecommunications Interface will be compliant with the following provisions as documented for software applications in Section F - Section 508 Software Accessibility Standards and Guidelines, F.2 Software Applications, Page 115. Refer the CSC Programming Standards and Guidelines for more information about Section 508 compliance.

# 8 References

The information discussed in this document was compiled by conducting a series of user interviews, reviewing CFS functionality and documentation, and review of supporting technical documentation.

## 8.1 Documents

The following documents were used as reference materials in compiling this document:

| Document References |
|---|
| Department of Commerce CAMS Support Center CFS-ASAP Interface Requirement Definition |
| Department of Commerce CAMS Support Center Estimate Accrual Enhancement – Phase III |
| Department of Commerce CAMS Support Center Requirement Analysis Periodical Estimated Accruals Enhancement |
| Department of Commerce Invoice Validate Post Process |
| Department of Commerce NOAA CAMS/CFS GTA Detailed Design |
| Department of Commerce NOAA CAMS/CFS Implementation Draft Telecommunications Detailed Design |
| Department of Commerce NOAA CAMS/CFS Implementation File Definition for OPAC BAC [GSA BAC] |
| Department of Commerce NOAA Implementing Grants in CFS Requirements Document |
| Department of Commerce NOAA National Weather Service Automated Payment Program Detailed Design |
| Department of Commerce OPAC Processing Procedures |
| Department of Commerce Requirements for Automating ASOS Services Invoice Payments |
| Department of Commerce Standard Interface-AP Requirements Definition Receiving Tickets, Estimated Accruals, Vendor Invoices, and Accomplish Corrections Final 1.0. |

Table 8.0 - Document References

## 8.2 People

The following individuals were consulted and provided input in compiling this document:

| Personnel References |
|---|
| Bradshaw, Doug, Department of Commerce, NOAA |
| Brunvoll, Steve, ICS |
| Dulic, Maurice, Department of Commerce, NOAA |
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| Green, Karen, Department of Commerce, NOAA |
| Hawkins, Herbert, Department of Commerce, NOAA |
| Holdsworth, William, Department of Commerce, NOAA |
| Huggins, Randy, Accenture |
| Iruku, Veera, ICS |
| Khetan, Reeta, NOAA Contractor |
| Muthuvairu, Krishnamoorthi, A&T |
| Perry, Fred, Department of Commerce, NOAA |
| Petteway, Joseph, Department of Commerce, NOAA |
| Schehl, Darren, Accenture |

| Personnel References |
| --- |
| Schoenberger, Cliff, Department of Commerce, NOAA |
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| Sikorski, Mike, Department of Commerce, NOAA |
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| Walters, Sandy, Department of Commerce, NOAA |
| Williams, Belinda, Department of Commerce, NOAA |

Table 8.1 - Personnel References